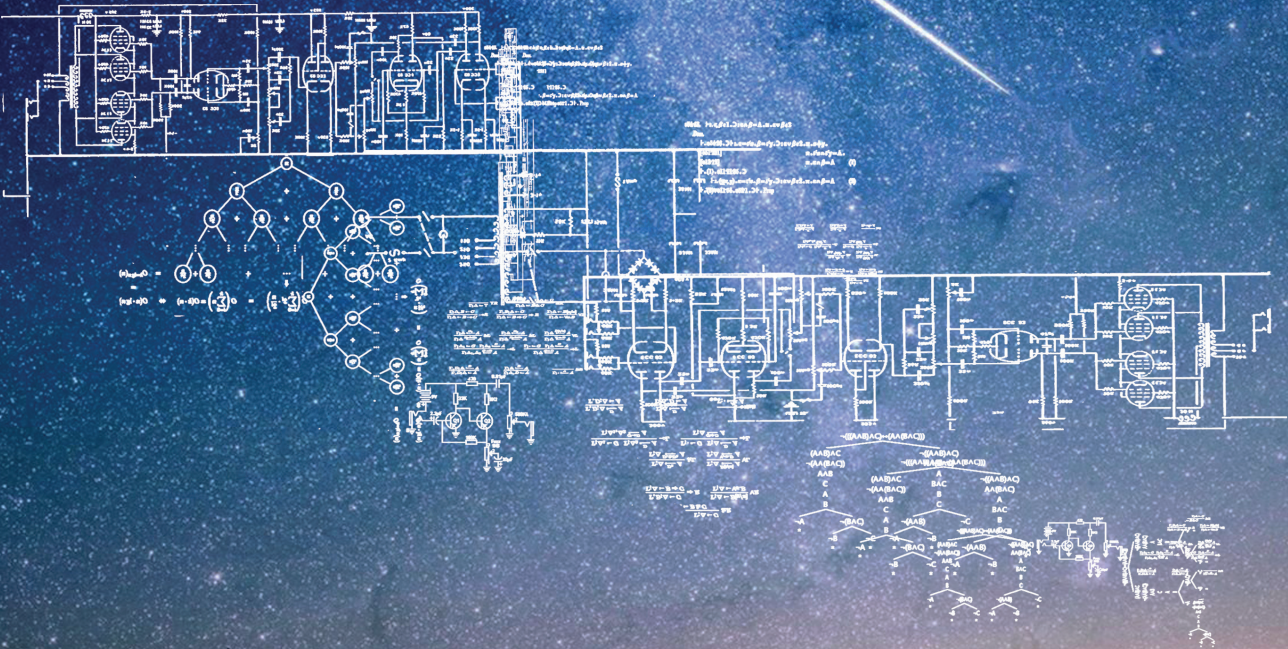


THE COWBOY POLITICS OF AN ENLIGHTENED FUTURE:

History, Expansionism, and Guardianship
in Isaac Asimov's Science Fiction

JARI KÄKELÄ



UNIVERSITY OF HELSINKI
FACULTY OF ARTS

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ABSTRACT

Isaac Asimov (1920–1992) was one of the central writers of the formative period of American science fiction, and among the first to emphasize the societal and political importance of the genre. This dissertation examines the themes of history, frontier expansionism, and guardianship in Asimov's key works, the *Robot* and *Foundation* series, in order to view his influence on the development of science fiction when it started to distance itself from pulp fiction and refine its key tropes and themes.

A significant part of Asimov's *Robot* and *Foundation* stories were first published as serials in the 1940s and 1950s *Astounding Science-Fiction* magazine, and the pulp publishing context is crucial in order to understand Asimov's impact on the genre. Thus, this dissertation combines the contextual examination of Asimov's main themes with a discussion of the views of the *Astounding* magazine editor, John W. Campbell, Jr., a key influence on Asimov's work. Moreover, the present study extends to Asimov's 1980s novels that combine much of his fiction into a unified grand narrative of future history.

My claim is that in Asimov's series the need to understand history in order to construct a sustainable future becomes the pivotal theme, both on the level of narration and on the level of characters that turn their knowledge of history into action. This awareness of history, I contend, leads to the recurrent realization that human culture will decline if stagnation is not reversed by frontier expansion. The pervasive frontier theme and the role of individual heroes in Asimov's work also reflect the Western backdrop of American pulp fiction. In this way, it demonstrates the science fiction genre's shift from cowboy heroes of Western fiction to problem-solving engineers on the intellectual frontier of the future. Finally, the historical and frontier aspects in Asimov's series point toward the notion of guardianship and the aspiration to apply the understanding of both history and science to engineer a more peaceful, yet non-stagnant future. Throughout his career, then, Asimov displays a tension between a utopian desire and the pragmatic and techno-meritocratic solutions typical to Campbell's stable of writers.

Thus, although Asimov's series is usually taken as straightforward prose fiction that focuses on solutions and explanations, this dissertation demonstrates its central tensions, which also serve to highlight the development of the science fiction genre. The readings presented make visible the ambiguous strains between Asimov's cyclical models of history and his admiration of the Enlightenment ideal of progression, between individual freedom and the notion of guardianship, as well as between pragmatism and utopia. Informed by American history, Asimov's series portrays how individuals make bold maneuvers in order to steer humankind toward a more sustainable future, thus engaging in what could be termed the cowboy politics of an enlightened future.

ACKNOWLEDGEMENTS

First encountering Asimov's fiction, I remember it as entering a world of sterile grass fields under open star-filled skies. Even if it turned out to be not quite as minimalistic as I remembered from my childhood readings, there is certain pragmatic scarcity to Asimov's writing. Often criticized for its lack of poetic finesse, Asimov's sketch-like characters and minimal descriptions, still just enough to transport the reader across enormous distances of space and time, function like graphs in a research report, showing the underlying complexity in their sparsely decorated laboratory of ideas.

On the face of it, the process of writing a dissertation can often seem like Asimov's fiction: complex ideas and plotlines unfold somewhere in the background, but all you see are talking heads and minimalist stage directions. But just as with Asimov, they can take you on voyages of interstellar span.

In many ways, my primary supervisor Professor Bo Pettersson is to thank for the existence of this particular journey, in a time and galaxy far away, being the one to encourage me to begin this project, and enduring the less-than-speed-of-light travel to our current location, giving invaluable navigational advice, and tirelessly improving my writing along the way. I would also like to extend my thanks to Docent Mark Shackleton who supervised my MA thesis on Asimov and guided me through my first attempts at examining the motifs of American frontier history in Asimov's work.

All journeys of vast distances include a lot of relentless ploughing onwards, even, or especially, when the view from the ship window seems to stay still no matter what you do. Dr Merja Polvinen, my dissertation co-supervisor, often felt like the true captain to this starship and is due for gratitude of intergalactic scope. Keeping the ship crew motivated and intellectually alert by innumerable thought-provoking discussions, sharp-eyed thoughtful commentary, and infinite patience – you are the reason the crew made it to the final destination, more or less in their right minds (apart from talking about themselves in 3rd person plural, it seems). As I know you to be a fan of extended metaphor (hopefully even as clumsily inconsistent as this), I dedicate this opening section, and indeed this entire dissertation, to you. For the possibly remaining mistakes, however, I claim full responsibility.

I would also like to thank fellow science fiction researchers and postgraduate students, Päivi Väättänen for friendship and help in practical and intellectual matters, as well as Mika Lopenen, Kaisa Kortekallio, Aino-

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In the course of these years I have also had the privilege of being introduced to the international science fiction research community. I wish to thank especially Donald M. Hassler, one of the elder statesmen of Asimov research, who with his wife Sue took me under their wing in one of my first overseas conferences, and made me feel at home conversing face-to-face with the researchers whose work I had until then only quoted with nervous reverence. The same applies to Javier A. Martínez, Rob Latham, and Sheryl Vint, thank you for welcoming the beginning researcher as an equal by way of what probably seemed just another poolside chat at another conference – the inclusion meant a lot to the newcomer; and to the numerous brilliant

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Some parts of chapters 3 and 4 are based on previously published articles, although they have been thoroughly revised and expanded on in this dissertation. These articles include “Managing and Manipulating History: Perpetual Urgency in Asimov and Heinlein.” *Fafnir: Nordic Journal of Science Fiction and Fantasy Research*. 2:1 (2014); “Asimov’s Foundation Series as a Grand Narrative of Turnerian Future.” *The Estonian Journal of English Studies* 2:1 (2011); “Robots, Foundations and Endless Growth: The Role of Frontier Expansionism in Asimov’s Work.” *New York Review of Science Fiction* 23:8 (2011); and “Asimov’s Foundation Trilogy: From the Fall of Rome to the Rise of Cowboy Heroes.” *Extrapolation* 49:3 (2008).

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ABBREVIATIONS OF THE TITLES OF ASIMOV'S WORKS

In the course of this study, Asimov's works are abbreviated as follows:

COLLECTIONS OF SHORT STORIES

<i>IR</i>	<i>I, Robot</i>
<i>CR</i>	<i>The Complete Robot</i>
<i>CS1</i>	<i>The Complete Stories Volume One</i>
<i>CS2</i>	<i>The Complete Stories Volume Two</i>
<i>RR</i>	<i>The Rest of the Robots</i>
<i>Dreams</i>	<i>Robot Dreams</i>
<i>RV</i>	<i>Robot Visions</i>

NOVELS

<i>EE</i>	<i>The End of Eternity</i>
<i>CS</i>	<i>The Caves of Steel</i>
<i>NS</i>	<i>The Naked Sun</i>
<i>RD</i>	<i>Robots of Dawn</i>
<i>RE</i>	<i>Robots and Empire</i>
<i>PF</i>	<i>Prelude to Foundation</i>
<i>FF</i>	<i>Forward the Foundation</i>
<i>F</i>	<i>Foundation</i>
<i>FE</i>	<i>Foundation and Empire</i>
<i>SF</i>	<i>Second Foundation</i>
<i>Edge</i>	<i>Foundation's Edge</i>
<i>Earth</i>	<i>Foundation and Earth</i>

AUTOBIOGRAPHIES

<i>Memory</i>	<i>In Memory Yet Green: The Autobiography of Isaac Asimov</i> 1920–1954
<i>Joy</i>	<i>In Joy Still Felt: The Autobiography of Isaac Asimov</i> 1954–1978
<i>IA</i>	<i>I, Asimov: A Memoir</i>

CHAPTER I

INTRODUCTION

This dissertation combines the study of genre, context, and themes in order to examine Isaac Asimov's (1920–1992) *Foundation* and *Robot* series and their impact on the development of the science fiction genre. My thesis is that the themes of history, frontier expansionism, and guardianship are closely connected in Asimov's work and that they are also symptomatic of the development of American science fiction from the 1930s to the 1950s. This period is crucial to the proliferation of the genre, which has become central in popular culture through games, television series, and blockbuster films. Even if many of the inventions envisioned in early twentieth century science fiction have become a part of our everyday lives, as I see it, the most culturally relevant import of science fiction is not its attempt at predicting the future, but the way it comments on the present, and, as Asimov suggested even in the 1950s, conducts thought experiments on the consequences of change in society.

Asimov was one of the central writers of the formative period of American science fiction. He was also one of the first to emphasize the genre's societal and political importance at a time when American society on the whole was going through changes that would affect the worldwide balance of power. By examining the pulp publishing context and genre alongside Asimov's application of historical models in his plot development, I shed light on the interconnected themes that arise from his Enlightenment idealism, didactic motives, as well as reliance on the expansion of knowledge. In doing so, my study contributes to our understanding of how literature and popular culture responded to the development of American society and national identity in the aftermath of the Second World War and at the beginning of the Cold War.

I.1 AIMS AND METHODS

I aim to show how Asimov's themes of history, American expansionism, and the tension between guardianship and individualism emerge from a complex web of interaction with the science fiction genre and its publishing context. In particular, I argue that the *Foundation* series makes use of an extensive

thematic parallel with the history of American westward expansion and Manifest Destiny. In my view, Asimov transforms this theme as his fiction turns the late nineteenth century fear of the cessation of development at the end of the frontier into a solution where expansion becomes the cure to a stagnating culture. This gives Asimov's series a depth of sociological and philosophical speculation that illustrates both the development of the genre and the ideological aspects shared by its innovators. Thus, the present study also discusses how the *Astounding Science-Fiction* magazine and its editor John W. Campbell, Jr. became central to the development of the genre. Examining the publishing context sheds light on an era of science fiction that preferred scientist and engineer heroes, and favored meritocratic elitism and technocratic rationalism. This era – from the late 1930s to the early 1950s – was later to be called the Golden Age of (American) science fiction in part because it shifted focus from lurid stories of action-adventure in pulp magazines to more serious considerations of the potential of scientific and technological development.¹ At the same time, the practitioners of the genre, many of them proponents of a rational science-based worldview, began to consider the genre as a way to participate in societal discussion. Also Asimov's fictional worlds manifest these aspirations by viewing rational understanding of the world as of paramount importance.

I begin my analysis with fairly traditional literary critical methods: narrative and interpretive analysis of larger story structures, which I find a fruitful way of determining how the text communicates its meaning and reveals its themes. However, I also approach Asimov's large, ideologically and historically linked themes by drawing on studies in thematics, genre, contextualization, and historiography. As the themes become visible through plot development and characters, I conduct analysis aided by studies on characterization and genre in order to examine Asimov's work together with the context of its production.

¹ As Adam Roberts points out, the term "Golden Age," coined by "a partisan Fandom," is of course far from being a neutral denominator for the era, and in this use it is usually considered to include only the kind of hard science fiction of "linear narratives, heroes solving problems or countering threats in a space opera or a technological adventure idiom" which Campbell's magazine could provide (*History* 195). Indeed, in this study, I employ the term "Golden Age" as a shorthand for this kind of science fiction, produced at the height of Campbell's influence in the 1940s and early 1950s.

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In terms of analyzing the historical and philosophical-ideological parallels that come to light, my dissertation combines the examination of frontier and guardianship themes in Asimov's work with studies of utilitarianism, Enlightenment resonances, and the characteristics of the historical novel. I find that the frontier and expansion theme comes across even in Asimov's original *Foundation* trilogy, which he initially modeled on Edward Gibbon's *The Decline and Fall of the Roman Empire* (1776–1789). In other words, I aim to pin down this development in Asimov's works in order to outline how some of its elements are products of their time, of the development of the genre, and of American history.

Thus, I examine the way Asimov's coexisting themes are based on an Enlightenment-inspired view of history and society as well as on the context of pulp science fiction from the 1930s to the 1950s. In this way, my study aims to provide a comprehensive picture of how the themes of history, frontier, and guardianship become central in Asimov's treatment of politics and social engineering.

1.2. SCIENCE FICTION, THEORY, AND ASIMOV

Defining any genre is a complex task. In the context of science fiction, this is further complicated by the way readers, writers, and critics frequently delight in coining new definitions of the genre and its subgenres. What is more, such definitions are often entwined with prescriptive delineations of what is science fiction *enough* to be called as such, what counts as *good* science fiction, and what science fiction *should be*, but is not yet. Thus, definitions of science fiction range from strict categorizations or theorizations and one-liners such as "Hubris clobbered by nemesis" (Aldiss 4) to viewing it as "literature of technologically saturated societies" (Luckhurst 3) or an "ongoing discussion" (Mendlesohn 1) that amasses influences from every conceivable literary genre. Still, most critics agree that science fiction is a genre that asks the question: What if? Furthermore, it asks this in a way that explores scientific ideas and their impact on the world and society that the characters inhabit. Here it would differ from mainstream fiction, where the explorations tend more towards the characters or their interactions with each other. Science fiction thus puts a special emphasis on fictional world-building, on the way an author "builds

a world to ‘house’ its ‘what if?’ (McHale 21). If a certain scientific or technological development took place in the world, what would be its consequences? But instead of delving any deeper into the never-ending game of definitions, in order to frame my analysis of the genre features of Asimov’s works I go briefly through some key concepts that are commonly used to describe elements in science fiction.

One of the tendencies in science fiction research is the focus on how the genre creates its effects for the readers, although these are not reader-response studies as such.² The concept of *sense of wonder* is a good example of the attempt to look at how science fiction is made special by the way it can provide the reader a kind of sublime vista, an effect “created by the writer putting the readers in a position from which they can glimpse for themselves, with no further authorial aid, a scheme of things where mankind is seen in a new perspective” (Nicholls and Robu 1084). This concept has been viewed by many critics as subjectivizing and mystifying rather than elucidating the effect it seeks to describe.³ Another view of the genre through its effects is the concept of *cognitive estrangement*, coined in *Metamorphoses of Science Fiction* (1979) by Darko Suvin, arguably one of the most influential theorists in science fiction criticism. Suvin famously defined science fiction as “a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author’s empirical environment” (7–8). This entails the idea that science fiction engages in representation that makes the described phenomenon unfamiliar, but as readers recognize what this defamiliarizing representation refers to, it enables them to discover new ways of thinking about our familiar reality and thus promotes rational understanding. Suvin’s treatment has been regarded as prescriptive (Stableford, Clute and Nicholls 313), dated (Rieder, “Defining” 193), and its ability to distinguish science fiction from other genres has been thoroughly

² Peter Stockwell’s *The Poetics of Science Fiction* (2000) is a seminal study of the representative details of how science fiction creates its reading experience.

³ In science fiction criticism, even in 1979, Darko Suvin called “sense of wonder” a “superannuated slogan” (83), which he was ready to retire in favor of more exact terminology. Yet the concept persists, and lacking better terms, for example Nicholls finds use for it to explain the effect of science fiction that is “curiously resistant to analysis” (“Big Dumb Objects” 13). See also Miéville (244n).

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contested (Miéville 231–247; Csicsery-Ronay 139–140).⁴ Nevertheless, the concept is still used in science fiction theory and criticism (see for example Van Parys 290, Morgan 269). In a recent reconsideration of the concept of cognitive estrangement, the argument has also been made that the core of the science fiction effect is in fact not the defamiliarization of the familiar, but the naturalization of the alien (Spiegel 369–385).

Suvin's other central term, *novum*, on the other hand, despite being linked with the notion of cognitive estrangement, has retained much wider recognition and use. The *novum* is a novelty or an innovation "validated by cognitive logic" which dominates the text and through which the estrangement is achieved (Suvin 63). The leading notion is that the presence of a *novum* in science fiction has to be scientifically (in practice often pseudo-scientifically) explained. In other words, the explanation must follow the logical premises of the fictional world. In Freedman's modification to Suvin's notion of cognitive estrangement, science fiction is not defined by cognition as such but by "the cognition effect," as he terms it, that it creates. This entails "the attitude of *the text itself* to the kind of estrangements being performed" (*Critical* 18, emphasis original), and in practice this makes the scientific method the crucial generic factor.⁵ The logic of the *novum*, or notions like it, were used to distinguish science fiction from fantasy already by John W. Campbell in the 1960s, on the basis that in fantasy the inventions usually do not require consistent logical explanations and thus the writers are freer to make up rules as they go along. Science fiction, on the other hand, represents for Campbell "disciplined freedom," that is, it postulates its rules at the start of the story, and sticks to them (see *Analog* 6, xiv–xv). Today, even though the concept is seen to be useful in the analysis of individual works, the presence of the *novum* is no longer considered such a central or necessary a feature of the genre. Csicsery-Ronay, for example, makes use of it, but questions the dominance

⁴ For an intervention in the Suvin-Miéville debate, see Williams (617–633) who tries to mediate between the contrasting views and salvage Suvin's notion.

⁵ Miéville contests this by pointing out that the cognitive effect of science fiction is created even if "neither the writer or the reader finds cognitive logic in the text's claims. Instead, they *read/write as if they do*," amounting to a sort of "generic folk-understanding" of what science fiction is (234–235, 239, emphasis original). In effect, Miéville suggests that science fiction is a sort of a game of make-believe, where writers and readers willingly play along.

of only one novum per text and whether it is necessarily for that novum to be strictly rational (74).

Along with sense of wonder, Suvin wanted to dismiss the term *extrapolation* as a similarly convoluted concept (83), but it is still so commonly used in science fiction criticism that it is barely considered a term. Adopted from mathematical terminology, extrapolation came to stand for the way science fiction writers create the premises of their future worlds and situations where some crucial change or innovation has taken place, by taking known scientific facts and principles and stretching them beyond what exists now. Thus, constructing complete fictional worlds and writing stories which explore the effects of this new thing on the world is closely related to the notion of the *thought experiment*. In the broadest sense, any science fiction story that makes use of a science fictional device or concept could be considered a thought experiment. Furthermore, for example McHale expands the considerations of how the world-building thought experiments of science fiction enable readers to think of alternatives (23). One of science fiction's key effects, according to McHale, is that it can enable readers to imagine the world as something different than it currently is (23). McHale goes on to argue that all literary fiction is like science fiction, "a kind of thought-experiment, in the sense that it projects a world rather than merely modelling a received one – or at least, it could fruitfully be read that way" (25).

In Asimov's work, the novum comes across as large-scale societal thought experiments which abide by the "scientific laws" of the story (even if they themselves are fictional), which must remain unchanged throughout and include a logical extrapolation. As such, the notions of extrapolation and thought experiment are more central for Asimov than is cognitive estrangement. What I seek to do in my study of Asimov's works is to contextualize them but also analyze how their themes reflect Asimov's and Campbell's notion of what science fiction should do, and how they contributed to the development of the genre.

Asimov's views of science fiction revolve less around the representative or narrative qualities of the genre and focus more on its effects on society through the ideas it is capable of transmitting. For Asimov, the central point of interest is not so much the effect that science fiction as literature creates for the individual reader, or its implications on fiction in general, but the impact that science fiction makes, or could make, on the entire human world.

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Because of his focus on society, in his 1953 essay “Social Science Fiction,” Asimov thus emphasizes humans more than technology itself. He defines “(Social) science fiction,” that is, what he calls a strain of work promoted by Campbell and *Astounding*, as “that branch of literature which is concerned with the impact of scientific advance upon human beings” (171). In Asimov’s view, technological change has more impact on history than political changes, because “technological changes lie at the root of political change” (166), and because technological changes have a more profound effect on people’s lives than political changes. In this way, he makes the point that the scientific-technological development is a central factor behind the rapidly and profoundly changing world – and science fiction is a response to this change. But rather than a mere reaction to the world, in his view, science fiction can also incite and steer action by “accustoming its readers to the thought of the inevitability of continuing change and the necessity of directing and shaping that change rather than opposing it blindly or blindly permitting it to overwhelm us” (196).

Thus, Asimov suggests that science fiction can offer ways to alleviate the inborn human resistance to change, and even ways to consider how the inevitable change can be maneuvered for the best possible outcome. In effect, for Asimov this amounts to a kind of social Darwinism: “Human societies, history shows, must also grow and develop or they will suffer. There is no standing still” (190). The need for controlled change and for frontier expansion are linked to Asimov’s notion of resistance to change as a crucial danger to the survival of humankind.

While Asimov views technology as the driving force behind change, he gives history and understanding history a central role in affecting that change. In social science fiction, he distinguishes between “chess game” and “chess puzzle” stories: in the former, the game starts at a fixed position (“the socio-economic environment we now possess”) and progresses with a fixed set of rules (“the motions and impulses of humanity”), whereas in the latter, the puzzle needs only the requirement of a fixed set of rules and can begin at any position (177–179). Asimov professes that he leans toward the “chess game” variety, and demonstrates how “history repeats itself” (179) in European history. His aim is to show how certain fixed positions can be identified, positions out of which the game can unravel in a recognizable way. Thus, he believes that “it is legitimate to extrapolate from the past because sometimes such extrapolations are fairly close to what happens” (183).

Even in terms of the real world, Asimov muses: “I cannot help but wonder if a maturely developed sense of social experimentation may not some day bear as much fruit for society as physical experimentation has done for science” (192). Hence, his aim is to widen the scope of the thought experiments in science fiction so as to make the readers try out different models of thought (192). As such, Asimov’s essay on social science fiction draws on the intellectual atmosphere of the 1950s science fiction under Campbell’s direction: the sense of a thoughtful yet practical understanding of history as a way to steer humankind to the future. These are essentially the same themes of history and guardianship of the future that prevail in Asimov’s mid-twentieth century work.

Of course, after the discovery of the fate of the German Jewish population during World War II, the notion of social experimentation began to carry a highly ominous overtone. Although Campbell remains the advocate of (scientific) pragmatism with regard to society, Asimov, with his Jewish background, seems less at ease with the notion. This is witnessed also in how the end of his essay goes against Campbell’s techno-meritocratic (and often racist) ideals, which the science fiction of the time tended to advocate. Asimov portrays Campbell’s kind of science fiction as the forerunner in promoting equality and unity of humankind by pointing out that many of their contemporary science fiction writers in fact ignore racial divisions among humans. He ends the essay with a suggestion that science fiction can have a unifying effect “insofar as it tends to think of humanity as a unit and to face humanity, white, black, and yellow alike, with common dangers and common tasks, which must be pushed to a common victory” (195). This desire to see Campbellian techno-meritocratic science fiction as a way of promoting equality creates the tension in Asimov’s work between the ideals of visionary leaders and ideals of Enlightenment.

1.3 ASIMOV’S GRAND NARRATIVE: THE INTERCONNECTED ROBOT-FOUNDATION SERIES

The challenge in writing about Asimov’s large, interconnected science fiction series – which spans over decades of his literary career and thousands of years in the fictional universe that he creates – is that there is so much plot that summarizing it even in broadest strokes is a formidable task. This is further

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complicated by the way Asimov retroactively connected three series of short stories and novels, which were originally conceived as separate, by writing prequels and sequels in the 1980s to the stories he began in the 1940s. In this study, I analyze the stories and novels primarily in the order of their publishing history so as to show how Asimov develops his themes, and provide details of his plots when need be. However, to make the overarching plotline of Asimov's series easier to follow, in the following I briefly summarize the plot of the whole series as one continuum.

In the chronology of the fictional world, Asimov begins with the robot stories. The short stories collected in *I, Robot* (1950) outline the development of humanoid robots, the safeguards programmed into them, and their gradual development into computers that are used to optimize world economy and production. The first of these stories set in the late twentieth century,⁶ and as Asimov returns to the robot stories throughout his literary career, in terms of the internal chronology of his creation they always relate the earliest events in his fictional universe. The robot novels *The Caves of Steel* (1954) and *The Naked Sun* (1957) are set at a time when robots have already been in use for some two thousand years, but at this point they are mostly banned on Earth. The novels follow a New York detective Elijah Baley and his assigned Spacer robot partner R. Daneel Olivaw, as they solve murders first on Earth and later beyond it. The people of Earth live in overpopulated and in many ways restricted underground Cities, and uphold tense relations with fifty flourishing Spacer worlds (planets originally settled from Earth), which allow the use of robots and place high emphasis on the individuality and free will of their human population.

These early robot novels center on Baley's realization that another wave of space exploration and expansionism is needed in order to rejuvenate, and in the long-term rescue, humankind from the sociocultural stagnation that threatens both Earth and Spacer societies. Baley's story is continued in *The Robots of Dawn* (1983), where he contributes to initiating the Earthpeople's

⁶ *I, Robot* states 1982 as the birth year of Susan Calvin, a prominent robotics scientist in the fictional world. There are several fan sites which draft timelines and place on them all of Asimov's stories in the *Foundation-Robot* universe, from 1995 AD to 498 F.E., that is, roughly 25066 AD, according to the fan site calculations (see e.g. http://www.asimovonline.com/oldsite/insane_list.html and <http://www.sikander.org/foundation.php>).

movement toward new space expansion, but the novel begins to turn focus on the robot characters of Daneel and R. Giskard Reventlov. In *Robots and Empire* (1985), the robot characters become central as they take the initiative to save Earth from Spacer aggression as well as to enable and steer the people of Earth toward space expansionism and the future of establishing a Galactic Empire. In the course of events, the robots reason their way to a sort of utilitarian approach of taking responsibility for humankind. Together these stories and novels form what is called Asimov's *Robot* series.

The next events in the chronology of Asimov's fictional world are related in the novels *Pebble in the Sky* (1950), *The Stars, Like Dust* (1951), and *The Currents of Space* (1952), commonly called the *Galactic Empire* series, or the *Empire* trilogy. *The Stars, Like Dust*, is set at a time when the expansionism initiated in the robot novels has been successfully carried out for thousands of years, but the Galactic Empire has not yet been fully established. *The Currents of Space* takes place some hundreds of years later, at a time when the Empire is being established and the planet Trantor (Asimov's galactic analogy of the city of ancient Rome) becomes a unifying power. However, just as in *Stars, Like Dust*, the plot revolves around local political intrigue and rather minor events – but Asimov also makes use of an extensive parallel with the cotton industry in the American South and slavery. Finally, *Pebble in the Sky* is a variety of a time slip story, where a protagonist from 1949 ends up in a time roughly a thousand years after the events of *The Currents of Space*, on a secluded and dystopian Earth that is gradually becoming uninhabitable because of increasing radioactivity. While some of these novels employ historical motifs, which are prominent in Asimov's other works, in the *Empire* novels the history and the development of the large lines of his fictional world are generally mere background for the plotlines and themes which remain essentially separate. Because they do not significantly contribute to the subject of this study, I leave the *Empire* trilogy outside the scope of this study, and call the stories that I examine the *Robot-Foundation* series.

Prelude to Foundation (1988) and *Forward the Foundation* (1993) focus on scientist Hari Seldon and his life's work of developing the science of psychohistory, which enables the prediction and steering of the future through a combination of statistical mathematics, sociology, and psychology. These novels are set at a time when the Galactic Empire has existed for thousands

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of years and has slowly begun to decay, as detected by Seldon's science. As a solution, Hari Seldon sets up the scientific community of the Foundation, central to the original *Foundation* trilogy. Again, I consider these novels only briefly, because they focus primarily on the character of Hari Seldon as something of an alter ego of Asimov himself. While Asimov here, too, makes use of a variety of historical parallels, the novels mostly fill in the gaps in the narrative of his *Robot-Foundation* series rather than develop it further. In doing so, Asimov repeats elements which he has been employing throughout the series (and arguably more effectively in its earlier stories).

The *Foundation* trilogy proper, first published as a serial in *Astounding Science-Fiction* magazine 1942–1950 and in book form 1951–1953, begins a few years before Hari Seldon's death, at a point where the Galactic Empire has lost its vitality and begun to stagnate into despotism. As Seldon's psychohistory has revealed, this will lead to the collapse of the Galactic Empire and an immensely long era of barbarism. Because Seldon makes his findings public, the leaders of the Empire see him as a threat against their authority, and his scientific community, the Foundation, is exiled to the distant planet of Terminus. From there on, the trilogy follows the Foundation as it begins its expansion into the Second Galactic Empire – following, as I will argue, stages rather similar to the development of the United States from the times of the early settlers to the beginning of the twentieth century. In this process of nearly four hundred years, narrated and focalized through a different protagonist in almost every chapter, the Foundation is transformed from a scientific community into a galactic power through stages of religious, commercial, and political expansion. It also encounters the Second Foundation, Seldon's safeguard for the development should the first Foundation fail, and the end of the trilogy becomes a struggle between the two Foundations. Finally, although the first Foundation are left under the impression that they managed to defeat the Second Foundation and that their future as the leaders of the galaxy is secure, the Second Foundation, comprised of scientists specialized in Seldon's psychohistory, remain secretly in control of the history of the galaxy.

Foundation's Edge (1982) and *Foundation and Earth* (1986) take place some hundred years after the final events of the *Foundation* trilogy. *Foundation's Edge* starts out with the protagonist Golan Trevize's suspicions that the Second Foundation is still operative, but as he travels the galaxy in

search of the Second Foundation, he encounters Gaia, a planet-wide collective consciousness. Gaia turns out to be a third guardian of Seldon's Plan, and it seeks to expand into "Galaxia." This is to include in its collective consciousness all matter in the galaxy, thus effectively ending the cycle of struggle of one human civilization against another. Trevize is made to decide whether or not Gaia will go ahead with this development, and *Foundation and Earth* recounts Trevize's journey to understand and accept his choice in favor of Galaxia. In the course of events, it is revealed that the robot Daneel, with its mission to take care of the survival of humankind, has been masterminding all the developments during this 20,000-year period of history: the expansion from Earth and the Spacer worlds into the Galactic Empire, both Foundations, Gaia, and finally Galaxia. The series ends at a point where the course of humankind toward Galaxia has been decided, but it leaves open the question what this entails or what this future looks like.

In this way, as Asimov connected his originally separate story cycles into a single fictional universe and under a unified plotline, he created a narrative of humankind from history of conflict toward a future of unified peace. The present study examines the complexities of this narrative and its publication and ideological contexts in order to analyze its interlaced themes of history, frontier, and guardianship.

It is important to understand that most of Asimov's fiction in 1940s and 1950s was first published in pulp magazines, most notably in *Astounding Science-Fiction*. In some cases, Asimov made changes and additions to the stories when they were republished in book format. The most notable of these are made to the early Foundation stories which, when first published in *Astounding* magazine, did not yet employ the narrative device of beginning some sections with alleged quotations from the fictional *Encyclopedia Galactica* – a point that becomes relevant in my analysis of Asimov's historical approach in chapter 3. Apart from that, Asimov turned the original stories into corresponding chapters with only minor changes in the book publication, and reorganized some of them. In this way, he created an even more straightforward continuum that highlights the turning points of Foundation history and adds to the sense of a historical novel that tracks the development of a galaxy-wide nation.⁷

⁷ For example, the story "The Traders" was originally published in the October 1944 *Astounding* (under the title "The Wedge"), and "The Merchant Princes" in August 1944

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The most significant change to the book version of the *Foundation* was the addition of the very first story, “The Psychohistorians,” which brought to the forefront the character of Hari Seldon, who was only a distant, seemingly all-knowing entity in the original magazine stories. This addition has been criticized for pre-empting the narrative tension and giving away the outcome of the series on the first pages (see e.g. Delany, “American Shore” 226). Still, because the stories first appeared in a serial format during the course of several years, many of the original magazine prints also open with fairly long synopses that place the stories into the continuum and provide some explanation for the current action, undermining some of this criticism. Even the magazine version which begins the series in May 1942 *Astounding*, opens with a short prologue that reveals the premise of the stories and some of what will happen. It presents a brief scene where the old and tired Seldon gives a final speech to his scientists and congratulates them on the success of the enormous work they have tackled. He reassures them that even though the “Galactic Empire is falling . . . its culture shall not die, and provision has been made for a new and greater culture to develop therefrom,” and that they can now “wait for [their] reward a thousand years hence with the establishment of the Second Galactic Empire” (*Astounding*, May 1942). This section, found only in the original magazine publication, could be said to give away the plot just as much as the added opening story in the book-form publication.

Despite such changes, the central theme of Asimov’s stories remains essentially unchanged in the book versions. They also retain their episodic quality as they construct a narrative of galactic history and civilizational rejuvenation through glimpses of events at crucial points of that history. Rather than introduce new themes or interpretations, the book versions emphasize the sense of witnessing large sweeps of history that was present even in the original magazine publications. What the new first chapter and the inserted *Encyclopedia* quotations add is a heightened sense of historical inevitability

Astounding (under the title “The Big and The Little”), but in the book version, the order of these chapters was switched to follow the chronology of the fictional world: the story about Limmar Ponyets, one of the first trader/missionary figures who began Foundation trade with the surrounding worlds, now comes before the story of Hober Mallow becoming the first of the Foundation plutocrats.

to the stories and an aspect of “dramatized essays,”⁸ where the exploration of ideas is central. I mainly employ the book versions of the stories, because they are more relevant for my focus on the development of Asimov’s themes over the course of his career and his larger connected *Robot-Foundation* series as a whole.

I.4. PREVIOUS RESEARCH ON ASIMOV AND PULP SCIENCE FICTION

Considering that Asimov’s literary career spanned from the 1940s to the early 1990s, and that he is regarded a canonical science fiction author, his work has garnered surprisingly little attention in literary criticism. In part, this may be because Asimov seems to leave so little for the literary scholar to do in terms of explication and interpretation. As Goldman notes,

[Asimov] has the habit of centering his fiction on plot and clearly stating to his reader, in rather direct terms, what is happening in his stories and why it is happening. In fact, most of the dialogue in an Asimov story, and particularly in the *Foundation* trilogy, is devoted to such exposition. Stories that clearly state what they mean in unambiguous language are the most difficult for a scholar to deal with because there is little to be interpreted. (21)

In his emphasis on ideas and desire to communicate them as clearly as possible, Asimov rarely includes subtle implications or figurative descriptions. Rather, he straightforwardly tells what is happening and what it means, and focuses on furthering the plot.⁹ This is perhaps one of the reasons why so many longer

⁸ Patrouch (48) points out this essay-like quality as an aspect of Asimov’s short story “The Evitable Conflict” (1950), as we shall see in chapter 5, but this seems a general tendency in Asimov’s fiction.

⁹ Early on in the *Foundation*, the character of Foundation mayor Salvor Hardin provides a good example of Asimov’s kind of straightforward exposition:

Your bunch here is a perfect example of what’s been going wrong with the entire Galaxy for thousands of years. What kind of science is it to be stuck out here for centuries classifying the works of the scientists of the last millennium? Have you ever thought of working onward, extending their knowledge and improving upon it? No! You’re quite happy to stagnate. The whole Galaxy is, and has been for Space knows how long. That’s why the Periphery is revolting; that’s why communications are

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studies of his work are also heavy on plot summary and touch fairly lightly on thematic devices or narrative analysis. However, even Asimov's plots are rarely very dramatic as such. Rather, they focus on the rational, gradual discovery of what has happened (or will, or should happen), frequently resulting in detective story-like narrative structures which revolve around problem-solving of some kind. Although the way Asimov narrates this is quite straightforward and his stories often consist of almost interchangeable characters, who only talk with each other while most of the action takes place off-stage, it is this sense of accumulating evidence, or knowledge and understanding of the world and the events described, which creates the narrative tension in much of Asimov's work.

In part, literary scholars seem to have so little left to do with Asimov also because of the biographical notes in the introductions to many of his works. Moreover, his extensive autobiographies – the massive *In Memory Yet Green* (1979) and *In Joy still Felt* (1980), and the posthumous *I, Asimov: A Memoir* (1994) – relate in detail his life and the development of his career, but also make reference to the process of writing and publishing his fictional works. These works have left little need for any biographies of Asimov, and the ones written, for example Michael White's *Isaac Asimov: A Life of the Grand Master of Science Fiction* (1994), make extensive use of Asimov's autobiographies and provide little additional information. Even further commentary on Asimov's work, utilized also in the present study, is offered by a collection of thoughtful interviews of Asimov in *Conversations with Isaac Asimov* (2005), edited by Carl Freedman. In addition, Asimov wrote numerous essays which explained the ideas in his fiction, such as the notion of "social science fiction" discussed above.

Scholarly work on Asimov's fiction largely begins in the 1970s, published in the journals *Science Fiction Studies* and *Extrapolation*, and in a collection of essays, *Isaac Asimov* (1977), edited by Joseph D. Olander and Martin Harry Greenberg, which offers some of the most insightful analyses of Asimov's underlying themes to date. In the course of this study, I refer to these studies and, when relevant, note my position as to their analysis. In the 1970s, also the first two book-length examinations of Asimov work were published. *Asimov*

breaking down; that's why petty wars are becoming eternal; that's why whole systems are losing atomic power and going back to barbarous techniques of chemical power.
(F 60)

Analyzed (1972) by Neil Goble is by today's standards a rather dated exercise of statistical, rhetorical, and grammatical analysis of Asimov's texts. Joseph F. Patrouch's *The Science Fiction of Isaac Asimov* (1974), on the other hand, sets out to survey Asimov's fiction up to 1970s and to do "practical criticism" and evaluative analysis. This work lays the groundwork for monographs on Asimov criticism, studying much of his fiction and some of his themes. However, the attempt at comprehensiveness also leads to long plot summaries at the expense of analysis.

The 1980s and 1990s saw more book-length studies on Asimov that mostly carry out surveys of his science fiction. Jean Fiedler's and Jim Mele's *Isaac Asimov* (1982) provides a kind of reader's guide and brief analyses of Asimov's historical approach as well as his recurrent detective/mystery story structures. Of the survey-type studies, James Gunn's *Isaac Asimov: The Foundations of Science Fiction* (1982, rev. ed. 1996) is perhaps the most comprehensive. Although Gunn takes the approach of "criticism in context" (3) and seeks to point out the trends and repeated themes in Asimov's work, in practice he, too, mostly tracks the author's career and the plotlines of his fiction. The same is true of William F. Touponce's *Isaac Asimov* (1991), which takes a similar reader's guide approach to Asimov's oeuvre. However, Touponce also makes interesting points about the Kuhnian scientific paradigms in Asimov's fiction, and in contrast to most other studies, approaches the works in the chronological order of Asimov's fictional world.

All of these studies are somewhat burdened by the fact that they attempt to do everything at once: to provide Asimov's biography, to survey his fiction, and to analyze it. While they offer valuable insights into and relevant details of Asimov's professional and private life, they are also rather fragmented and superficial in terms of examining Asimov's works. As I have noted, this illustrates the basic problem with writing about Asimov's fiction: there is so much plot, such complex intrigues and developments that run through centuries and generations that many of the critical works seem to stop at merely tracking those plot movements.

Something of an exception, Donald M. Hassler's *Isaac Asimov* (1991), is a reader's guide-style treatment, too, but since it is composed in part by Hassler's academic articles on Asimov, it offers more detailed studies of specific themes in Asimov's oeuvre. Most relevantly for my study, Hassler

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considers Asimov's Enlightenment resonances and engages in an analysis of the links between Asimov's ideas of necessity and social science fiction.

After the 1990s, studies of Asimov become scarce. At this point, his work may no longer have been considered current, but simply part of the already-examined science fiction canon. Admittedly, in comparison with trends such as cyberpunk and posthumanism, Asimov seems dated and devalued, as regards topics and artistic merit. However, one book-length exception to this dearth of scholarship is Donald E. Palumbo's *Chaos Theory, Asimov's Foundation and Robots, and Herbert's Dune: The Fractal Aesthetic of Epic Science Fiction* (2002). In this ambitious work, Palumbo focuses on chaos and fractal symmetry as self-similarity in Asimov's (and Frank Herbert's) plot structures, maintaining that Asimov's *Robot-Empire-Foundation* series reveals a structure of fractal aesthetic in its "feedback loop driven plots, recycled plot structures, reiterated themes and motifs" (2). Asimov, Palumbo argues, "deconstructs his earlier works himself by inserting chaos theory into his later works – but only to reveal that it was there all along" (23). On this basis, he conducts an insightful, if rather conventional reading of the recurrent themes in the series, ordered according to his findings in the plot structure. On the whole, Palumbo's work seems an extensive exercise in structuralism in that he meticulously traces and categorizes the patterns of recurring motifs, as well as arguing that the flat characters and lack of action in Asimov's series are aspects that make it a masterpiece of "structural virtuosity" (15). Thus Palumbo's work, too, reflects the sheer amount of plot in Asimov's series, and despite his chaos theory framework, he follows the earlier critical attempts at summarizing it.¹⁰

In general, it could be said that all of the book-length studies on Asimov seek to provide encompassing treatments of his complete oeuvre, and in so

¹⁰ In addition to the problem of reading complexity theory into a work of fiction written before the emergence of that theory, Palumbo's approach of aiming to prove the presence of fractal structures in Asimov's plots and his chaos theory interpretation makes him merely list the different occasions where he sees the self-similar patterns emerge. Ultimately, he seems to use chaos theory only as a metaphor for the structures he detects in Asimov's series. Thus it seems doubtful whether the metaphor to classify these specific plot structures yields significant knowledge of them. Despite its confusing metaphorical framework, Palumbo's study perceptively tracks the repeating patterns and motifs, and can thus provide something of a checklist of Asimov's narrative patterns.

doing they lean heavily on paraphrasing what happens in his stories. More in-depth analyses of specific works can be found in articles and more thematically ordered studies on science fiction in general. David Mogen's *Wilderness Visions: Science Fiction Westerns* (1982) takes an extensive look at the frontier theme in some of Asimov's work, and is thus relevant to my study. Apart from passing mentions, the prominence of the frontier theme in Asimov's series has been largely overlooked in previous scholarship. Historical models other than Asimov's deliberate use of Edward Gibbon's *The History of the Decline and Fall of the Roman Empire* (1776–1789) and the crucial importance of history in Asimov's fiction have received surprisingly little attention. This study therefore aims to link the frontier theme with previous research on aspects of the Enlightenment and rationalism in Asimov's work.

A more condensed, but perceptive study relevant to my examination is J. Joseph Miller's 2004 article "The Greatest Good for Humanity: Isaac Asimov's Future History and Utilitarian Calculation Problems," which resonates with my analysis of Asimov's guardianship theme. In addition, Albert I. Berger's 1988 article "Theories of History and Social Order in Astounding Science Fiction, 1934–55" has served as an important sounding board for the ideas of paternalism in Golden Age science fiction, even if I do not share Berger's predominantly negative view of the import of Campbellian science fiction. Mike Ashley's *The Time Machines: The Story of the Science-Fiction Pulp Magazines from the Beginning to 1950* (2000) provides an extensive survey of the development and pulp context of modern (American) science fiction, and has been helpful for chapter 2 in this study. Other works of central importance for the political-ideological analyses of Asimov's work in this study are Carl Freedman's *Critical Theory and Science Fiction* (2000) and Carl Abbott's *Frontiers Past and Future: Science Fiction and the American West* (2006).

As I have noted, approaches that attempt to study the large lines of development in Asimov's work easily lead to extensive plot summary. It is difficult to avoid doing so, because Asimov presents the ideas in his fiction through the intellectual processes of problem-solving which his characters go through. Asimov's sparse style of writing affords no in-depth character analysis or extensive explorations of metaphorical devices, that is, his characters are frequently not much more than vehicles for the larger ideas. As my argument is based on a historical and thematic reading of his work, it

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is also impossible for me to completely avoid paraphrasing the plots, owing to the fact that the structures of Asimov's plots create the themes. Thus, while I carry out extensive in-depth analysis of Asimov's work, I find myself having to comply with the implication of many of the previous studies: that much of the meaning in Asimov's work can be found at the more general level of the recurrent structures and patterns of his plots and (often stereotypical) characterizations.

Still, it also seems to me that Asimov criticism has focused mainly on the ideas that are explicitly presented and their sociological, technological, and philosophical implications and extrapolations. In my view, this leads to critics playing the exact game that the author wishes the readers to play. What is studied are the ideas represented instead of the way *how* they are represented and *what kind of* a view of the world they create. My study, therefore, aims to examine the representational aspects of the works and how they come across in plot and characterization. In other words, I analyze how Asimov's techniques of representation contribute to his underlying themes, themes that go further back than the immediate past of the *Astounding Science-Fiction* magazine.

1.5 THE STRUCTURE OF THIS STUDY

This study is structured around the three themes that I focus on in Asimov's science fiction: history, the frontier, and guardianship. To provide the background for my argument, chapter 2 continues the reflections begun in this introduction on the genre of science fiction and its American development in the context of early twentieth century political and historical rhetoric, as well as the publishing environment of pulp fiction magazines and John W. Campbell's editorial influence. Just as most of the more extensive studies on Asimov's work progress along the publication history, my study, too, will be conducted mostly in the order of publication. This is due to the fact that, in addition to the narrative arc of Asimov's series, I analyze how Asimov develops the three main themes over the course of his career.

Chapter 3 examines the way Asimov roots his series in history by explicitly applying methods of historical fiction, and how, in the spirit of Enlightenment, the need to understand history in order to construct a future becomes a central theme in his work. My argument is that this can be seen

both on the level of narration which emphasizes the historicity of the events, and on the level of characters, who are aware of their historical moment and are able to turn this awareness into action. This chapter focuses on Asimov's original *Foundation* trilogy, because it establishes and centers on the theme of history in Asimov's series.

In chapter 4, I contend that this awareness of history, and the ability to affect its course, leads in Asimov's work to recurring realizations that the human civilization is stagnating and that this stagnation can, and should be reversed through frontier expansion. Asimov's work, I argue, draws on and refers to American expansionism and the philosophy of Manifest Destiny. Thus, Asimov's view of the rejuvenation of humankind is based on the ever-receding frontier and the infinite growth of "civilization" as necessary elements for the survival of humankind. The frontier notion is present also in Asimov's characters that are often a fusion of historically aware leaders and the cowboy heroes of popular literature. Transferring the imagery of American frontier expansion to space adventures was already an established convention when Asimov began the series, and, I argue, while his characters exhibit some of these cowboy hero qualities, they also become emblems of frontier trade and politics – as well as heroes of intellectual, rather than physical, action. In addition to the *Foundation* trilogy, this chapter considers Asimov's robot novels that develop the theme of frontier expansionism even more explicitly by foreshadowing an earlier and more concrete cycle of space pioneering in the chronology of the fictional world.

Chapter 5 ties together the historical and frontier aspects of Asimov's work by investigating the guardianship theme they point to. Hence, the chapter extends the scope of analysis to the entire *Robot-Foundation* series. Most of Asimov's science fiction seems to be searching for "a better way of doing this" (*Anthology* xiii), to borrow Campbell's notion of the purpose of science fiction. That is, Asimov's fiction recurrently tries out different ways of ensuring the survival of humankind as a whole. In part, this seems to arise from Asimov's reliance on the power of science, and his Enlightenment-inspired ideals of seeking and applying new knowledge to better steer the world. However, at the same time, the vision of an enlightened guardianship becomes intertwined with paternalist views. The solutions that Asimov offers reflect the Campbellian pragmatic ethos and result in a sort of utilitarian

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management of humankind, carried out by a variety of actors who watch over or assume guardianship of humanity. I show how Asimov develops this idea throughout his career, and transforms it from individual level guardianship to the steering of all humankind. Thus, this process in Asimov's fiction takes place in constant tension with the human striving for individualism, made even more pointed by the individualistic pulp fiction aesthetics and characteristics that his work adheres to throughout.

By examining Asimov's interconnected themes of understanding and applying history to build a guardianship of an expanding humankind, I aim to present a wholesale view of Asimov's major works, which are influential both for the development of the genre of science fiction and as a mode of participating in social discussion. The gist of Asimov's view, as I see it, points to political and ideological solutions carried out by significant individuals at crucial points in history. Asimov's individual characters, armed with understanding of history and the ability to turn this knowledge into action, frequently perform political maneuvers, with the audacity and self-certainty of the cowboy hero, so as to steer their society toward a continuous frontier expansion. In doing so, they engage in what I term the cowboy politics of an enlightened future.

CHAPTER 2

GENRE AND CONTEXT IN ASIMOV'S SCIENCE FICTION

When examining Asimov's work in terms of Golden Age science fiction, we need to take into account the pulp publishing background where it is rooted. While genre is not the prime focus of this study, genre theory informs my analysis of the development of pulp science fiction and its influence on Asimov's work.

Regardless of subgenre, whether Western, detective, science fiction, or something else, pulp fiction was affected by its mode of publishing, which favored fast-paced writing with a high degree of standardization, hyperbole, and stereotyping. The stories focused on action instead of polishing the methods of narration, and this also led to mostly archetypal and one-dimensional characters. As the magazines were printed on cheap paper and sold at a low price, in order to maximize profit the stories had to be constructed so that even the first sentence would make the reader want to buy the magazine, and serializing brought about cliffhanger endings to maintain the readers' interest and also make them buy the next issue. As a result, the stories became successions of mini-climaxes, witnessed also in the episodic quality of Asimov's series. The fast pace was also due to the haste with which the stories were written: because the magazines paid rates of no more than half-a-cent per word, to make a living the writers had to produce a lot of text quickly. Especially in science fiction, the readers, too, had a distinctive role in shaping the style of the stories as the magazines and the writers were quick to react to reader comments in the letters columns (Stockwell 80, 91).

Although stories which we now label as science fiction had existed before the heyday of the pulps, especially its American variety became a more prominent genre through the pulp publications. As Asimov started his career writing for these magazines during the genre's formative years, the significance of his interconnected themes of history, frontier, and guardianship – analyzed in chapters 3 to 5 – can be better understood against the background of the dime novels and pulp magazines which created the character types and plotlines that influenced Asimov's work.

2.1 GENRE IN THEORY AND PRACTICE

Since Yuri Tynyanov's notion that genres should not be studied in isolation but in relation to each other, genre theorists have stressed the dynamic nature of literary genres (see Duff 29–32). Taking this dynamism as a starting point, Alastair Fowler's *Kinds of Literature* sought to bring order to the fragmented field of genre research. For Fowler, change is the central characteristic of genres, and literary significance can be found in “variations or modifications of convention” (18). His core argument is that genres and works of literature are in a relationship of active modulation rather than passive membership, and that genres should be considered vehicles of communication and interpretation rather than means of classification or prescription (Fowler 22, 37).

Fowler extends Husserl's idea of “horizon of meaning” into a concept of the “generic horizon” for works of literature (259). Although defining the soft-edged boundaries of genres and the features of a generic horizon is never unproblematic, in Fowler's view at least a partial reconstruction of the signals that the work has sent in its original context of appearance is possible, because generic features are bounded “by a context of historical and biographical possibility and probability” as well as the literary context (258). As Fowler sees it, each historical genre has a “generic repertoire” which consists of typical traits like genre-specific features of character, style, and structure (60–72). Grasping the generic codes gives a starting point to contextualizing and understanding a work (259), but according to Fowler, to do this one needs what he calls “generic competence” – the ability “to recognize at least some of the genres that are current” (449). Discussing this complex faculty that has to be learned and is never complete, and which is connected with the reading process, interpreting meanings, and linguistic competence (45), Fowler notes that the development of this faculty is different in each reader.

In the context of conducting literary analysis this boils down to carrying out the thorough analysis, which is at the core of most literary research, with an awareness of genre as an active means of communication. In fact, Fowler's emphasis on the fluid nature of genres informs my treatment of the development of pulp and Golden Age science fiction. Fowler's concepts of generic horizon and competence resonate with the discussion of the science fiction “megatext” as a kind of language that only the readers competent in its “grammar” can fully grasp (Broderick n.p.).

In his pointedly pluralist approach in *Metaphors of Genre*, David Fishelov notes that the problem with Fowler's system is that it does not account for the real-world situation where all of the stages of generic development may occur simultaneously, even within one single work. Fishelov approaches genres by studying the potential of using biological, family, social institution, and speech act analogies in genre analysis. Because these "deep metaphors" can give new insights but also limit our understanding of genres, Fishelov's argument is that the analogies should achieve a "division of labor" between themselves, since a conceptual framework which works on some aspect of the generic field may be useless or even misleading in some other case (1–3).¹¹

On the one hand, Fishelov, like Fowler, maintains that genres are transmitted through history and that they shape the way writers produce and readers respond to literary works (10). Thus, he sees genre as a "mediator" between the author and the reader, and considers generic "rules" to be "reading directions" for readers, and an example to be followed or a source of provocation for authors (Fishelov 14). On the other hand, Fishelov criticizes Fowler for overemphasizing the role of genres as a signal system and does not agree that there is a "generic code" that the reader must possess to interpret the text. While Fishelov notes that interpretation involves generic knowledge along with other types of knowledge, he argues that instead of determining, the "text activates our relevant knowledge and assumptions concerning various genres of whose tradition the text reminds us" (26).

The strength of Fishelov's theory lies in its openly metaphorical model and in the acknowledgement of the plurality of genres and the means needed to elucidate them. The present study uses these genre theories as a sounding board to focus on the generic influence of pulp fiction on science fiction, and to aid in grasping the background and context of Asimov's work.

2.2 PULP FICTION AND THE ADVENT OF THE COWBOY HERO

The early twentieth century heyday of pulp fiction was the first explosion of mass-entertainment. In effect, dime novels and pulp magazines were the kind

¹¹ Fishelov's aim of accounting for generic background seems to be fairly close to Robert D. Hume's *Archaeo-Historicism*, which also advocates (historical) contextualization for the study of literary works but in a more comprehensive way.

of popular entertainment that television has been since the latter half of the twentieth century, and many of the original features of pulp fiction carried over to the ever-increasing number of Western, action adventure, and detective television series from 1950s onward. This section discusses the development of the genre of science fiction in the light of its history in dime novel and pulp publishing, with an eye on the theme of frontier heroism, and considers the development of the genre repertoire, its connections with other pulp genres, and its deliberately established *family resemblance* (Fowler 42, Fishelov 53–83) with earlier literary traditions. In science fiction criticism specifically, Rieder makes a convincing case for an approach to genre which acknowledges it as a historical process in the manner of Fowler. In this way, the complexities of genre can be seen more effectively “within parameters that are social rather than just literary” (“Defining” 193), unlike for example Darko Suvin’s highly formalist conceptions of science fiction.

The rise of popular fiction – and, in part, its frontier hero themes – can be traced to the dime novels. The 1830s growth in the American market economy brought about a rapid increase in urban population, as well as spread of literacy, industrialization, print technology, and mass production of adventure stories, story papers, and dime novels. Although the first dime novel, *Malaeska the Indian Wife of the White Hunter* by Ann S. Stephens, issued by Irwin P. Beadle in 1860, had potential for representing female and Native American experience of the frontier expansion, the dominant tone of the dime novel formula as one of male heroism was set by an even more successful Beadle publication, *Seth Jones; or, The Captives of the Frontier* by Edward S. Ellis, later the same year (Bold 22–24). Gradually, the stories developed the sensationalized topical themes of Indians and pioneers into the romanticized fast-drawing men who wore guns on their hips, archetypal characters that came to stand for individualism and courage even as they became increasingly removed from realistic historical contexts (see also Sullivan 3). Introducing the concept of a recurring hero that appeared in several stories added to the popularity of the dime novels (LeBlanc 16). For example, the western hero character of Buffalo Bill – a fictionalized version of the real-life scout, bison hunter, and showman William Frederick Cody – was taken up by several publications and became a popular hero who was later implemented also in pulp magazines.

Genre and Context

At the turn of the century, the magazines were further boosted by the ready availability of cheap pulpwood paper and quickly gained popularity over the dime novel format. The pioneer of this kind of publishing was Frank Munsey who started printing the all-story magazines *Munsey's Magazine* and *The Argosy* in 1896 (Ashley 23, Hutchinson 6), and also the former dime novel giant Street & Smith began publishing their paper-covered books in magazine form in 1903. Magazine publishing contributed to the emergence of numerous subgenres: Street & Smith's *Nick Carter Library* became the *Detective Story Magazine* in 1915 (Ashley 37), *The Buffalo Bill Weekly* dime novel series turned into *Western Story Magazine*, and by the same token, genres like romance, war, and mystery followed in this transition to pulp magazines (Hutchinson 7). This led to the proliferation of genres where, by the 1930s, it was common that individual writers contributed to a wide variety of subgenres.

Even if pulp magazines provided romanticized views of heroism and great adventure instead of the horrors of war, poverty, and crime, they consciously connected with their contemporary context (see Holsinger 147–162). Drawing on the same triumphant images and nationalistic narratives as newspapers and politicians, the male-centered adventures contributed to the conservatism of the formula (Bold 24). Still, as the “adult world” themes were often not much more than garnishing to make the rather archetypal stories seem more current (Masteller 273), the stories are understandable also when removed from their contemporary context of writing. In effect, the historical circumstances of the stories changed, but the familiar narrative line survived, producing tales of heroes that transcended class and regional identities (Bold 25).

The immense popularity of dime novel and pulp magazine stories is often attributed to the way they fed the working class readers' sense of self-reliance and glorified the resourcefulness and courage of the average man as opposed to men with wealth and hereditary positions (Wecter 341–342, Bold 21). Although the simple and over-dramatized style of the pulp magazines is easily considered as a sign of a low quality, they have also been seen as a re-empowerment of their readership (Aldiss 249). The original audience consisted of unemployed workers, adolescent boys, young men in office and retail jobs, and recent immigrants to the United States who were not yet fluent in the English language (Stockwell 99). The pulp heroes were almost invariably

WASP adventurers, but also successful their own societies, which was exactly what many of the immigrant boys aspired to become (Stockwell 99). Moreover, the pulp magazines had become popular during the Great Depression also simply because they were “the cheapest thrill around” (Hutchinson 7), and could provide escape from the harsh reality. The tough and infallible pulp heroes persisted by their common sense, logical thought, and physical talent, all qualities which the readers with little social or economic power could consider attainable.

In *Adventure, Mystery, and Romance: Formula Stories as Art and Popular Culture*, John G. Cawelti studies the popular genre story formulas and their archetypal patterns. Investigating the subgenre-specific formulas – and the individual stories which he views as variations of the formulaic plot and character elements specific to each genre – he posits that they function by adhering to the cultural codes within which such stories are commonly conceivable (Cawelti, *Adventure* 5–6). Popular fiction commonly aims at escape and entertainment, and thus a high degree of standardization is a virtue if the writer is able to balance novelty with familiarity and excitement with the gratification of recognizing the formula, at best sustaining suspense even if the reader knows the ending that the formula dictates (13–17). While in *Adventure*, Cawelti sought to cover both genre and myth with his concept of the formula, in *The Six-Gun Mystique Sequel*, his revised study on the Western genre, he considers formulas more specifically as “patterns of character, episode and theme” associated with the genre (*Six-Gun* 8). Genre, in Cawelti’s context of the Western, then becomes a body of texts “which a culturally knowledgeable person would call Westerns” – as long as this person also possesses a “competence to decide” if a particular work belongs to this genre (8). Cawelti’s notions of formula and genre thus seem somewhat akin to Fowler’s ideas of generic competence. That is, Cawelti leans toward the “‘family resemblance’ school” (9), and, like Fowler (*Kinds* 45), acknowledges the difficulty of further discerning the acquisition of this competence, or what exactly it entails. Still, Cawelti’s main focus is on the cultural study of the use of the frontier mythology in fiction rather than on genre as such. According to Cawelti, popular genres perform the function of a social and cultural ritual that reaffirms cultural values, but he also detects in them aspects of game, since the stories produce “experience of excitement, suspense and release”

and “ego-enhancement” through escapism (*Six-Gun* 17–18). Thus popular fiction genres can both entertain and offer ways of escaping the real-world complexities into worlds where the hero always wins and the detective always solves the crime (18).

The early twentieth century Westerns discussed by Cawelti had a fairly limited repertoire in terms of plotlines, characters, and settings, and the other pulp modifications of these formulas – like space opera – retained their recognizability through adherence to some of its key aspects, often merely changing the settings and the props. Because the typified characters associated with these kinds of popular genres became an integral feature of also Asimov’s narratives, I now take a closer look at these heroic pulp figures.

THE COWBOY HERO AND OTHER PULP HEROES

In his Leatherstocking novels (1823–1841), which have been seen to rival Sir Walter Scott’s historical novels, James Fenimore Cooper gave one of the first fictional literary expressions to the myth of the frontier and the heroic pioneer character whose exceptionality rises from his close relation to wilderness (Cawelti, *Six-Gun* 57–62). Although Cooper’s work can be seen as the literary origin of many fictional and mythical patterns in the Western genre, and certainly as an inspiration for the frontier heroes of the dime novels from 1860s onwards, the development of the stereotypical cowboy hero originated specifically in dime novels, pulp magazines, and the early Western films. Many of the dime novel cowboys were still confused ramblers rejected by society. Owen Wister, often considered the father of Western fiction, combined many of the elements of popular conception of the West (Aquila 9), made his protagonist in *The Virginian* (1902) a kind of a larger-than-life hero, and brought in romance as one key component of the stories. By the 1930s the cowboys had generally become the self-certain guardian figures who always knew what to do and “could overthrow evil by any of several techniques drawn from their arsenal of cowboy skills” (Savage 22–23). Trained by the rugged frontier and armed with knowledge that raised them above other men, their regular course of action was to “first outwit and then outpunch any enemy” (23–24). The cowboy hero possessed essentially the same violent frontier skills as the villains he had to defeat, but used them to defend the helpless community (Cawelti, *Six-Gun* 29). This justified the violence and transformed

the potentially savage nature of the cowboy hero into the socially acceptable role of the guardian.

These heroics have a rather tenuous relation to history, for although the real West was violent at times, it was more likely that anyone died from old age than in a gunfight (Sonnichsen 10–11). Measuring men by how quickly they drew their revolvers entered the Western from the Wild West Shows, like that of William “Buffalo Bill” Cody, where everything had to look spectacular. Even the nineteenth century dime novels engaged in the process of active mythmaking by combining history with sensationalist language, and turning the history of American expansion into a national epic. This was a way to capitalize on the grand vision of taking over the continent – and to sell story magazines and tickets to the shows. Indeed, the cowboy figure has been seen to have two essential functions: transmitting social values and selling merchandise (Savage 150). The cowboy figure, the image of a national hero who symbolized the American ideals of “[t]ruth, honor, justice, preparedness, righteousness, free enterprise,” thus became a tried-and-true method for successful marketing (150–151). In this use, the Western recounted the uniquely American individualism by stories acted out in the frontier wilderness setting of the birth of the nation.

In general, pulp fiction focuses on strong emotions and action, resulting in one-dimensional and archetypal characters of saintly superman heroes and purely evil villains. Through such typified characters, they create juxtaposition between the adherence to common values upheld by the society, including the individualistic hero who often also becomes a patriot as he rises above the uniform mass of people to defend their uniformity.¹² At the same time, this hero figure reflects the rather ambivalent early nineteenth century American culture, which was both a decidedly freedom-loving nation and at the same time a slave-holding society. It was a land of wide unsettled frontiers on the one hand, and growing commercial and industrial cities with urbanized culture on the other. As Kathleen Chamberlain notes, the “popular American heroes have often been iconoclastic outsiders who subverted institutions even as they reinforced them” (180). The hero’s individualism is part of his rugged frontier

¹² As Dizer points out, alongside dime novels and pulps existed also serial books of the Horatio Alger, Jr. type, containing excessive patriotism and seeking to set morally ‘wholesome’ examples by the almost invariably white Anglo-Saxon heroes, who in intelligence and other qualities surpassed all other nationalities (75).

education, which gives him the tools to defeat enemies of the organized society, but also makes him an outsider. Indeed, it seems that remaining an outsider is an essential part of applying the frontier wisdom of when and against whom to exert power (and violence) to protect the masses. This paradoxical situation is also at the heart of the American hero figure who often is the wandering guardian that can never fully return home.

For example, Doc Savage, “the Man of Bronze,” one of the dime novel publisher Street & Smith’s most popular early twentieth century characters, was a sort of a Super-American, the ultimate self-made man who has acquired nearly superhuman strength, intelligence, and knowledge through intensive training. He was a character tailor-made to demonstrate that success depended on one’s own enterprise despite the Great Depression (Hutchinson 34–35). In addition to all that is good and virtuous, Doc Savage embodies almost all of the characteristics, skills, and traits that can be found in the later American popular culture hero characters, who use individualism to uphold the system (34). The immense popularity of the character led to establishing Doc Savage clubs with a “Code” that included patriotic undertones of allegiance and championing justice, together with exhortations to happily endure the Depression reality.¹³ Doc Savage became a guardian figure who travelled around the world on missions of saving the world from non-American villains.

The additional attraction of science fiction in this context was, according to Brian Aldiss, the fact that even if other hero pulp formulas provided a sense of control over one’s life through identification with the infallible hero, “[s]cience fiction offered an unusual and almost limitless extension of the hero and of power” (249). The worlds to be conquered were infinitely wider, and instead of individuals or nations, the heroes of science fiction affected entire galaxies. In short, Aldiss argues that pulp science fiction extended the formulas of pulp fiction to the extreme, and that with a focus on science and invention, the stories made the hero’s inventive mind his greatest wealth (249).

These nearly omnipotent heroes, who right all the wrongs by using any means available, also inform Asimov’s writing. The *Encyclopedia Galactica*

¹³ “Let me strive, every moment of my life, to make myself better, to the best of my ability, that all may profit by it. Let me think of the right, and lend all my assistance to those who need it, with no regard for anything but justice. Let me take what comes with a smile, without loss of courage. Let me be considerate of my country, of my fellow citizens and my associates in everything I say and do” (qtd. in Hutchinson 42).

quotations in Asimov's *Foundation* series even insert gently ironic comments on this tradition: "Tales without end are told of these massive, lonely figures . . . It is difficult now to tell which tales are real and which apocryphal. There are none probably that have not suffered some exaggerations" (*F* 141). Asimov himself admitted the influence of the early pulp heroes on his stories: "I have larger-than-life heroes, that is just because pulp fiction always did (The Shadow, Doc Savage, etc. – I read them and was influenced by them). That, however was not what I was interested in" (Ingersoll 74). Although Asimov himself insists that his characters are mere transparent vehicles for the ideas he wants to focus on in his stories, as we shall see, his characters bring with them historical baggage that begins to affect the ideas he wants to communicate.

2.3 PULP SCIENCE FICTION AND THE GOLDEN AGE

American pulp science fiction was born against this backdrop, with authors who contributed also to magazines of other genres, sometimes with minimal changes to the storylines and characters' props to make it, for example, either Western, science fiction, or fantasy. Thus, also the mass entertainment form of science fiction was often based on modelling the future on the past, and giving modernized surroundings for the story and character types familiar from other pulp genres. Much of the early space opera transferred the cowboy and action adventures of the dime novels and pulps into space with a future setting, thus implying that human nature and impulses remain essentially the same, even if technology or the environment change.

However, perhaps as a defensive reaction against this background, many of the readers, editors, and critics of science fiction have exhibited a strong desire to separate it from rest of the pulps as well as from "mere" popular culture in general. For example, in his foreword to *The Cambridge Companion to Science Fiction*, James Gunn notes that even though science fiction developed into a genre of its own in pulp magazines, it "only seemed to be a part of the pulp magazine tradition," and that instead of "emerging from the adventure pulps, science fiction was an outgrowth of the popular-science movement" (xvii).¹⁴ It is true that in practice, some of the science

¹⁴ Further examples include Parrinder (1979), who in his editorial to *Science Fiction: A Critical Guide*, notes that the essays in his volume focus on authors with an "uneasy

fiction magazines started as hobbyist science experiment publications and gradually accommodated the speculative science and fictional writings (Ashley 28). Be that as it may, it seems clear that pulp science fiction inherited both the aspect of scientific inquiry from the popular science magazines and the cowboy, detective, and other adventure story plotlines and characters from the older Munsey magazine traditions (Gunn, “Foreword” xvi). Even if the alleged exceptionality of their stories was in part marketing, the pulp science fiction magazines also drew their sense of exceptionality from this twofold background of popular science and pulp fiction, in addition to the enthusiastic community of authors and readers that formed around it.

GERNSBACK’S “SCIENTIFICTION”

In Europe, the works of Jules Verne (1828–1905) had an integral role in the development of science fiction. It has been suggested that because the myth of America as the place of the future was so strong, the “American Vernerian fiction” soon started to leave the “European Vernerians” in its shadow – thus contributing to the development of distinctively American kind of science fiction (Stableford 22). In the early years of the twentieth century, *The Argosy* and other Munsey magazines published a number of stories which entailed scientific or fantastic extrapolation (Ashley 27). An early example of this can be found in Edward S. Ellis’ dime novel *The Steam Man of the Prairies* (1868) which was a hybridization of the Jules Verne type of inventor fiction and the American popular Western story.

However, it was Hugo Gernsback whose publishing and editorial work began the strain of pulp magazines devoted entirely to science fiction. An entrepreneuring young immigrant interested in radios and electrics, Gernsback

relationship with the genre,” with the implication that these “good writer[s]” are more worthy of academic attention (ix). This is symptomatic of the tendency to gloss over the “lesser” works of pulp science fiction as mere popular culture and to favor those works that can be associated with the more “literary” tradition. Similarly, Claeson (1990) deplores the way “many current readers still think of [science fiction] as a product solely of twentieth-century American popular culture instead of the continuation of a literary tradition” (6–7). Seeking to deliberately distinguish science fiction from the rest of the pulps goes back to the early days of the magazine form of the genre. From 1940 onwards, the *Astounding* editor John W. Campbell, Jr., was one of the active proponents of the distinct quality of science fiction over other kind of literature, as discussed below.

turned to publishing to educate Americans on the new prospects in technology. In 1908, he founded his first magazine *Modern Electrics* which was aimed at experimenting hobbyists, but it soon included also Gernsback's speculative articles and serialized his long story *Ralph 124C 41+*, thus providing him an outlet for freer speculation (Ashley 28–29). Even as he ventured into fiction, Gernsback still considered the magazines primarily a tool for education and required plausible extrapolation to the extent of providing diagrams amid the narration to illustrate the functionality of the inventions in the story. In 1913, Gernsback sold *Modern Electrics* and established *Electrical Experimenter*, which later became *Science and Invention* and extended the scope of articles beyond electrics. In his editorials, Gernsback sought to stimulate his readers' imagination and encourage them to write their own stories, gradually expanding his magazines into the realm of fiction.

As Gernsback tried several formats in a variety of magazines, his insistence on scientific accuracy produced, as Ashley puts it, “fiction that might stimulate invention but held little entertainment value,” which most likely led to the demise of his early magazines (35). In 1926, Gernsback launched *Amazing Stories* which finally proved a success, perhaps not the least because of his freer approach. In the first issue editorial, he outlined the idea of the magazine as providing interesting and entertaining stories that would “supply knowledge that we might not otherwise obtain – and supply it in a very palatable form” (qtd. in Ashley 50). Even if there was increasing focus in *Amazing Stories* on entertainment value, the magazine still claimed to draw new knowledge from its speculative but ultimately science-based stories. *Amazing* was the first magazine to concentrate solely on “scientifiction,” as Gernsback first called it, adopting the term “science fiction” by 1929 (Attebery 33).

In terms of Fishelov's idea of the family analogy of genre relationships, Gernsback can be seen to actively establish the textual ancestry for the genealogical line of science fiction by naming its founding fathers. *Amazing Stories* launched with reprints of stories by writers like Jules Verne, H. G. Wells, and Edgar Allan Poe, and thus Gernsback's call for new stories is framed by these ancestors as well as his initial definition of the genre as “charming romance intermingled with scientific fact and prophetic vision” (qtd. in Attebery 33; Ashley 49–50). As Attebery notes, by singling out such works of proto-science fiction, reprinting them, and calling them similar, Gernsback was

in a sense making Verne, Wells, and Poe science fiction writers after the fact, and by this method building a tradition for his new magazine (33). Although similar stories were printed in other magazines, *Amazing Stories* established a conscious point of definition by combining the publishing traditions of the scientific romance, the popular dime novel, pulp storytelling formulas, and scientific journalism (34).

FROM SPACE OPERA TO THE CAMPBELL ERA

Science fiction in the early pulp magazines was not yet very sophisticated in its treatments of the *novum*. What many of the stories ended up doing was to extend and re-appropriate the popular imagery of the dime novels and pulp fiction, and superficially combine it with the rising interest in technology and space exploration. As a result, the larger-than-life action-adventure science fiction of the 1930s acquired the epithet “space opera,” infamously named so after the Western fiction “horse opera” and romantic dramas, or “soap operas,” by Wilson Tucker in his 1941 denunciation of the “spaceship yarn” (Westfahl, “Space” 197). Many of the plots were only “thinly disguised westerns, mysteries or lost-world romances” (Attebery 34), and included the stock elements and characters of any action adventure: heroes, villains, and damsels-in-distress (Ashley 70).¹⁵ Such stories became science fiction by minimal modifications to the formulas, that is, by changing the setting from prairies or lost civilizations to space future or another dimensions, the Indians or other villainous Others to aliens or monsters, and the six-shooters to ray-guns. Also, as the early experimenter and hobbyist magazines had taken a step

¹⁵ Racism, sexism, and stereotypical gender roles were common, and female characters, if present at all, were often reduced to mere props. The female characters in these stories may possess exceptional talent and qualities, but only to make them worthy objects of rescue and companions for the superhuman males. Their most important qualities were their unquestioning devotion to the male heroes, and their passion for becoming good wives. For critique of the misogynistic tradition in science fiction, see for example Joanna Russ’s essay “Images of Women in Science Fiction” (1972). In general, historians and theoreticians of science fiction nowadays tend to be somewhat apologetic of the sexism of Golden Age science fiction while at the same time ignoring the female authors who were contributing to the genre in the 1940s and 1950s. For a challenge to the traditionally male-centered view of the history of science fiction, see Lisa Yaszek’s *Galactic Suburbia: Recovering Women’s Science Fiction* (2008) which studies the female science fiction author’s work from 1940s onward.

toward science fiction by presenting popular science in a thinly fictionalized form, this strain of stories developed into yarns of naïve “gee-whiz,” where awe at future inventions backgrounded storytelling. In short, while the “raw excitement” of the crude stories can be seen as their appeal in their original context (Roberts, *History* 178), nowadays they appear more significant as a background for what followed.

This was the publishing environment where John W. Campbell, Jr., became the editor of *Astounding Stories*. He changed the magazine name to *Astounding Science-Fiction* in 1937, and the era often called the “Golden Age of science fiction” is considered to begin around 1938 when he became full editor of *Astounding* – and to end somewhere around the early 1950s when *Astounding* was to some extent overtaken by other magazines, but also the burgeoning paperback publishing and television.

While Campbell’s role in the development of the genre of science fiction in this era is widely acknowledged, what he has actually said in his editorials and essays is rarely examined in detail. Because of his significant impact on Asimov’s writing, the rest of this chapter takes a closer look at Campbell’s views of science fiction (and the world) in order to analyze the context where Asimov began writing science fiction.

Campbell became a catalyst of the Golden Age and a central figure in an attempt to distance science fiction from the pulp association of poor-quality adolescent stories. As Roberts puts it, Campbell wanted “idea fictions rooted in recognizable science,” and “can-do stories about heroes solving problems or overcoming enemies, expansionist humano-centric (and often phallo-centric) narratives, extrapolations of possible technologies and their social and human impacts” (*History* 195). Campbell insisted that the authors consider the long-term consequences of the *nova* they presented – instead of escaping this consideration by ending with a vision of a utopia or total destruction as many of the earlier stories did (see also Mendlesohn 3). In terms of the connection with the frontier themes, as Wolfe notes, “[Edgar Rice] Burroughs moved the frontier hero to other planets, and [E. E. Doc] Smith crossbred him with the super-scientist and moved him across the universe, [but] these *Astounding* stories provided him with the essential context for all real frontier narratives – a history” (*Evaporating* 129).

While many of Campbell’s reforms can be seen as logical continuations and further refinements of Gernsback’s work, Campbell also introduced subtle

but significant changes of emphasis. One of these was the aim to humanize the stories so that they would “read just as though they were contemporary stories in a future magazine” (Ashley 109). This could now be done because as the genre had developed, it had also brought up a readership that was familiar with the genre’s typical tropes and themes so that lengthy explanations were no longer necessary to set the scene. The authors could trust the readers to be able to fill in the blanks (Attebery 40) and rely on what Fowler would call the generic competence of their audience. Instead of the earlier stories which sometimes amounted to vast “info-dumps” where the story got lost in all the detailed descriptions of space future settings, the new stories came closer to resembling the realistic novel where not every detail of the world is explained.

Another major innovation in the 1940s magazine fiction was the way the scientific method and technological innovation came to be applied to “the fundamental questions about society and the mind,” in addition to the earlier focus on science as solutions to physical problems (Attebery 39). This kind of faith in the social sciences led several writers to concentrate on the politics, religion, and other collective activities of future societies (39). In fact, Asimov’s *Foundation* series is a good example of the application of both of these developments: it reads like a future historical novel, and its main *novum* is the social/statistical science of psychohistory which a scholarly society applies to shorten the period of a future “Dark Age” after the collapse of a Galactic Empire.

Campbell would engage in detailed discussions and correspondence with aspiring writers, and exhort them to make their ideas more coherent and believable (IA 72). Doing this, Campbell liked to provoke people, sometimes to the point of infuriating them to force “differentness of thought” (Chapledaine et al. 1, also 21–22). This makes it sometimes difficult to discern the amount of irony in his arguments, and what is more, Campbell’s way of provoking his writers to force them to think harder resulted in argumentativeness which has been seen as one of the reasons why Campbell’s role within the development of science fiction has been acknowledged but his domineering presence also criticized (Leslie 40–84).

In his editorials for *Astounding*, Campbell was the proponent of not only what he saw as a new era in the development of human science and culture, but also of a new kind of literature. Campbell’s introductory essay

to *The Astounding Science Fiction Anthology* (1952) sums up many of the ideas present in his 1940s editorials, and the anthology includes stories which he considered integral in setting the mood for the new kind of literature that was science fiction. Certainly promotional rhetoric for the volume, his essay is also consistent with the enthusiastic, if prescriptive, tone and spirit of enlightened engineering that prevailed in his Golden Age editorials of *Astounding*. Frequently seeking historical parallels to explain the significance of contemporary developments and progress, Campbell projects a deliberate message of technological optimism, characteristic of his desire to see science fiction as a continuation of the Renaissance. In his view, both the Renaissance and the Enlightenment were about “the outgrowth of a great concept: that men could make the things they wanted.” These eras focused, in Campbell’s opinion, on “both understanding and using nature,” giving rise to the Industrial Revolution, where “natural law was harnessed to make things,” finally leading to what he calls the “Technological Revolution,” or “Technological Era” in the early twentieth century, which “brought methods of creating new things that do not exist in nature” (*Anthology* x–xii, xiv). This streamlined version of the history of human understanding and exploitation of nature is typical of the optimistic attitude of the early twentieth century science fiction pulps. Science fiction, Campbell and others believed, can conceptualize and develop further the early twentieth century Technological Revolution, because it is precisely the literature for the Technological Era:

It, unlike other literatures, assumes that change is the natural order of things, that there are goals ahead larger than those we know. That the motto of the technical civilization is true: “There must be a better way of doing this!” (xiii)

In Campbell’s vision, the drive of a technological civilization extends into a “method of living together; a method of government, a method of thinking, or a method of human relations” (xiii). Also history becomes a part of the engineer’s required knowledge because understanding history can lead to discovering new ways to build on the past.

In his promotion of science fiction, Campbell also views the “old” forms of literature as “bitter, confused, disillusioned and angry . . . stories of neurotic, confused and essentially homeless-ghost people; people who are trying to live by conventions that have been shattered and haven’t been able

to build new ones” (xiv). In contrast to this, he posits the “new literature” of science fiction to more effectively take up large themes, and deal with change as a permanent part of human life and the world. He sees science fiction “tell of goals and directions and solid hope,” providing for a “stability of a compass needle that points always to the pole it never attains, but knows surely is there” (xiv). In this rhetoric of optimism and constant progress, Campbell argues for “dynamic stability that lies in going instead of in being” (xiv), but rather than seeing constant change through the disillusion and confusion more common in post-war literature, Campbell fashions a narrative of progress and reliance on scientific advancement.

In his editorials, Campbell can be seen to consistently present science fiction as a kind of literature which is decidedly different from the rest. Doing this, he contributes to what Huntington sees as “SF’s sense of its own importance and thoughtfulness [which] is itself an important part of the SF phenomenon” (2). Campbell casts the science fiction writers and readers as the greatest minds of the age, a kind of elite group who understand how the world works, and who thus also have the capacity to affect its course (see also Attebery 38; Luckhurst 73). What is more, the way Campbell frequently constructed his arguments on analogies of historical events reinforced the sense that what he and his writers were doing in science fiction was an integral part of history, and indeed would be of historical importance. The rhetoric in Campbell’s essays and editorials drew in the audience and promoted a sense of exceptionality, while also emphasizing the importance of the thought experiments that were conducted on the pages of *Astounding*. Doing this, Campbell was also tapping into the superman rhetoric among the budding fandom (see Pilsch 524–542).

At the same time, also the readers’ letters column in Campbell’s new *Astounding* brought readers together and contributed to establishing that fandom. Together with the magazine’s story contests, the correspondence helped to break down the barriers between readers and writers, and to create a sense of participating in the development of both the genre and the ideas it explored. This fostered the sense of a connected and cooperative pursuit for new knowledge at the forefront of science and engineering solutions that new discoveries could be imagined to yield, and served as a powerful hatching place for new ideas and emerging writers of the genre. (Attebery 37) Asimov

and numerous other writers started as avid readers of *Astounding*, and writers to its readers' letters column.

On the whole, Campbell brought about a new kind of quality by demanding well-argued stories written in coherent and efficient prose that would convey believable futures and populate them with credible characters (Attebery 39, Aldiss 248–249). As Westfahl notes, in this way Campbell sought to provide science fiction “a literary agenda that even the most erudite readers could admire and appreciate” (“Mightiest” 26). Although some stories still had many of the characteristics of the space opera, many were also marked reactions against its reckless violence, and Campbell-edited stories approach their topics through knowledge, intelligence, and rationalization instead of ray-guns. However, even if his editing made for better-written stories, Campbell was interested in literary quality only insofar as it fit his agenda of effectively conveying the ideas in the stories. In his essays, Campbell mostly ignores the connection between science fiction and the other action-adventure pulps published at the same time through the pulp medium (“Place of SF” 12), and provides something of a brief apologia for the lack of artistic merit in the early magazine science fiction by noting that it is a young genre that has its strength in “its concepts and its thoughts, not in its polish and routine and formula” (“Introduction” xiii).¹⁶ Indeed, for him, too much focus on form might get in the way of the thought experiments and the ability of science fiction to function as a vehicle for the ideas. Therefore, with his notion of the “new literature,” Campbell effectively aims for an active and integral role for science fiction in the sphere of societal and political discourse, but makes a deliberate point of not caring too much about literary artistry.

As for Campbell's role in the development of the genre at large, Fishelov's criticism of Fowler's organistic fallacy – the assumption that the lifespan of genres is a linear progression from birth to maturity to death (Fishelov 28–35) – is a valuable reminder. For at the same time as *Astounding* was transforming

¹⁶ Campbell does note that “it would be lovely if I could get both literary and predictive values” but for his promotion of the new kind of literature, literary quality is secondary. As Campbell envisions it, science fiction provides the only “medium for speculative thinking in public” by which “people who understand and feel the trends and broad movements of science can discuss the problems they see coming.” At the same time, he recognizes that this is “a value . . . of fiction in general,” but “under-realized” in fiction other than science fiction. (*Campbell Letters Vol II* 324–325).

the genre of science fiction, many magazines were still reprinting older works and publishing stories that adhered to the old space opera formula. Also writers whose “taste and politics collided with Campbell’s,” some of them more experimental in their style and narrative techniques, turned to other magazines (Attebery 41), spawning movements parallel to Campbellian science fiction (see also Luckhurst 66–67; Roberts, *History* 196), and in the 1950s publishing moved toward the book format. At the same time, magazines like *Galaxy Science Fiction* arguably brought the genre even closer to the mainstream level in psychological depth (Attebery 41–44). Eventually, this led to the wide variety of styles and approaches present in science fiction today, where works which challenge the Campbellian technocratic subject matter and aesthetics exist side-by-side with works that continue the tradition and conventions of the Golden Age.

As we have seen, Campbell envisioned for science fiction an active and integral role in societal development. Campbell’s view of science fiction seems entangled with a kind of positivist ideal where science itself will be able to provide all answers and to anticipate the goals toward which humankind should strive. For Campbell, “[s]cience is a method of predicting what will happen” and “a system of understandings by which accurate prediction is possible” (*Campbell Letters Vol II* 319), echoing Auguste Comte’s aphorism of “from science comes prediction; from prediction comes action” (Pickering 566). Combining this positivist view of science with his ideas of the genre of science fiction, Campbell bestows on science fiction a similar role of prediction through its thought experiments. Indeed, Campbell takes this as far as to argue that “‘Science’ means ‘Predictable’ – and ‘science-fiction’ means prediction-fiction” (*Campbell Letters Vol II* 320). Still, even as Campbell’s enlightened engineers are constantly seeking for a “better way of doing this,” his vision of the future never really recognizes the value of every individual. The focus on management often leads to an ideal of enlightened despotism, where only the select technologically competent few will be free to act according to their individuality, as discussed in chapters 3 and 5. In effect, Campbell himself never ventures to extrapolating what those better ways of living might be. This he leaves to his writers.

2.4 CAMPBELL'S INFLUENCE AND "THE WEB OF INTERTEXTUALITY"

As Hassler points out, a communal kind of "web of intertextuality" (Asimov 12) has been evident in science fiction almost from the beginning of the magazine era. As a result of new writers emerging from the letters columns of the magazines, which were active fora for discussing and dissecting the published stories, magazine-published science fiction developed a strong sense of community between the readers and the writers, thus making the genre into an "ongoing discussion," as Farah Mendlesohn calls it (1). For example, in the *Before the Golden Age* anthology (1975) Asimov collected pre-Golden Age stories that were influential to him and thus gave his readers access to the stories and references that he grew up with as a writer, accompanied with his reminiscences of reading those stories and the effect they had on him. As Hassler notes, in criticism, the fact that science fiction writers are so self-aware and open about this sense of working as a community is often dismissed as nothing more than fan activity, and its implications are regularly downplayed as mere adherence to formulas (12–13). It would seem, however, that if science fiction is studied mainly by focusing on the popular genre formulas, as discussed in 2.2, there is a danger of ignoring the fact that interconnected work and participation in that ongoing discussion became a central aspect of the science fiction scene. In fact, in addition to the active letters columns, even Hugo Gernsback's early *Amazing* reprints of Poe, Wells, and Verne, and his explicit wish for more stories in the same vein, started this conscious web of intertextuality. Thus, many of the writers, like Asimov in *Before the Golden Age*, deliberately comment on the roots of ideas in their stories as a way of taking part in that web.

This sense of science fiction as first and foremost an ongoing dialogue of ideas still goes on, for example in the discussions of hard science fiction authors David Brin, Gregory Benford, and Greg Bear, who added to Asimov's series with their "Second Foundation Trilogy."¹⁷ They see their contributions as a process

¹⁷ Rather than further imagine Asimov's series, Brin, Benford, and Bear update some of Asimov's ideas with more recent science and fill in some of the remaining gaps in the already existing narrative. They do not venture beyond the events in Asimov's *Foundation and Earth*, the novel set in the latest age of Asimov's fictional world, nor do they consider what the completed collective consciousness of Galaxia would entail.

where they “revisit” the assumptions of the older works and add to them, even if the process is, in their view, often misunderstood as “sharecropping” (Bear 22, 30–31). The concept of a science fiction “megatext,” first suggested by Brian Attebery and Damien Broderick (Csicsery-Ronay 77n4), seeks to explain this kind of intertextuality specific to science fiction: it goes beyond allusions between individual texts and encompasses writers making use of and playing with the genre’s established and shared images and motifs (see Vint 57). The concept thus emphasizes the communal aspect of the genre and the “shared subcultural thesaurus” created by all of its texts (Csicsery-Ronay 82–84). In Csicsery-Ronay’s view “sf texts are not autonomous; they depend on each other for comparison, dialogue, the grounding and elaboration of ideas” (84). This view approaches the works expressly through the genre and the fandom, and emphasizes the role of the readers’ (and authors’) competence in the genre at the same time as it somewhat paradoxically praises the universality of the genre’s approach.

The notion of megatext entails the idea of competence in understanding what constitutes science fiction’s generic repertoire, but it also implies that the writers consciously draw on and develop this repertoire. Viewing all the texts of the genre as an ongoing discussion seems rather different from the notions of traditional genre theory. For Fowler, the readers seem to be more passively at the receiving end, although “the processes of generic recognition are . . . fundamental to the reading process” (259). Although Fowler sees the competence to identify the generic repertoire as important, he does not extend this into considering it active participation, as the notion of science fiction megatext does.¹⁸ Indeed, also Fishelov approaches genres through the

¹⁸ In his recent *Encyclopedia of Science Fiction* entry, Broderick roots for an even more restrictive interpretation of the generic competence demanded by science fiction: “only readers inducted into the sf megatext web or intertext – only ‘native speakers’ of its grammar – will be competent to retrieve or construct anything like the full semiotic density of a given text” (Broderick n.p.). As central as it was to Fowler, he viewed the notion of generic competence as problematic because it could never be complete and it appears to be fairly dependent on the individual. Indeed, he offered no delineation as to what it consists of, merely considering it “a promising subject for future research” (45). Broderick, too, notes that the task of theorizing the knowledge of megatext is still ahead. However, his view of the acquisition of this competence seems rather exclusive as he envisions it take place through “an apprenticeship” whereby the reader learns “decoding” of the genre’s “difficult vernacular” by sufficient exposure to the genre’s megatext (n.p.). By this rhetoric,

reader's expectations, their recognition of genres through their conventions, and the resulting interpretation after the fact, rather than as a participation or a dialogue (90, 149). It seems to me that as Fishelov seeks to view genres through case-specific metaphors, the most obvious metaphor for science fiction, as witnessed by the notion of megatext is not Fishelov's analogy of genre as social institution but an analogy provided by the science fiction community itself: science fiction as application of scientific method.

In terms of the specific nature of science fiction, the key point here is the way the writer and fan community itself tends to view science fiction as thought experiments where new theories are constructed in dialogue with the old. From the readers' letter columns in Campbell's *Astounding* to the present criticism, this discussion considers the thought experiments of science fiction to be something like a simulation of using the actual scientific method. Indeed, it has been argued that Campbell's most significant achievement in terms of developing the genre was to open it up to a "new sense of narration" where also the reader is asked to become an active participant – to respond in the letters' column to the ideas presented in the stories and editorials – resulting in a "debating persona" as the core of this kind of science fiction (Leslie 80). Viewed this way, science fiction would then create a community which speculates not so much (or not only) on scientific theories (which would be left to actual science), but on the large changes in society, influenced by science and technological advance. Following the spirit of scientific method, the scientific community would examine these developments by conducting thought experiments – imagining societies changed by scientific advance and engaging in discussion over them with new stories and reader's comments – ideally, to test hypotheses with a logical rigor analogous to actual science.

ASIMOV AND THE CAMPBELLIAN POLITICS OF MANIPULATION

As the editor of *Astounding*, Campbell was a formative influence on Asimov, who may be the clearest example of a Campbell-raised Golden Age writer. Asimov was eighteen years old when he first met Campbell and submitted his very first science fiction story. Although Campbell published only a few of his early stories, Asimov kept coming back and, from that point on, was

Broderick seems to continue the Campbellian tendency to portray science fiction readership as a kind of group of the elect, which requires proper training before entry.

under Campbell's regular "tutelage" (*Campbell Letters Vol I* 20). Throughout his career, Asimov remained conscious of the influence of *Astounding* and Campbell, and considered Campbell his "literary father" (*Memory* 201).¹⁹

Campbell believed in a utilitarian sort of rationalism. In his view, people in general were incapable of governing themselves, and thus the engineers and scientists should be in power, because they were the only ones who really understood how the world works (Abbott 108). As Luckhurst notes, Campbell's editorship of *Astounding* can be seen as the culmination of the "engineer paradigm," proudly professing technocracy (68). Although Campbell wanted writers to develop rather than recite his ideas, his hands-on editorial work and choice of stories had a multifaceted effect on what kind of stories were published. For example, while offering his early stories to *Astounding*, Asimov recalls discovering Campbell's racism in the early 1940s when first struggling over stories where Campbell was "intent on making [Asimov] stress the superiority of human beings without actually telling [him] this was what he wanted" (*Memory* 262):

He was a devout believer in the inequality of man . . . in theory, he felt that people of northwestern European extraction were the best human beings.

In science fiction this translated itself into the Campbellesque thesis that Earthmen . . . were superior to all other intelligent races – even when the others *seemed* more intelligent on the surface. (*Memory* 261, emphasis original)

Even if Asimov did not share Campbell's political views,²⁰ he wanted to be published in *Astounding* and occasionally had to give in to Campbell's view. Asimov eventually turned to robots and started avoiding extraterrestrials in his stories partly in order to get away from the racism that Campbell advocated (*Memory* 276).

¹⁹ Asimov thought it "the marvel of Campbell" that "[i]t didn't matter that he rejected you. There was enthusiasm about him and an all-encompassing friendliness that was contagious. I always left him eager to write further" (*Memory* 201).

²⁰ The long arguments between Asimov and Campbell over issues of racial prejudice and segregation continued throughout their friendship, as shown for example in Campbell's letters to Asimov from 1950s to 1960s (*Campbell Letters Vol II*, 162–564). However, Asimov notes that in later years, they corresponded less "because of deep disagreement on social issues" (*Yours* 102), a disagreement that can be witnessed in Campbell's increasingly acrimonious letters.

Campbell encouraged a blend of meritocracy and authoritarianism,²¹ and the politics in Golden Age science fiction are quite often top-down manipulation with little concern for any actual democracy. Berger sees this tendency to admire successful manipulation as extending even further: Campbell's view of scientists was, he suggests, "elitist, and contained within it the seeds of authoritarianism" and "admiration for the successful manipulator and exploiter of nature" (179). Campbell's desire for the technocracy to lead humanity to a better future seems a kind of reflection of the Kantian conception of Enlightenment which did not shun enlightened despotism as a method of leading humanity to progress. Despite his autobiographical caveats, Asimov's interest in elite manipulation as an intellectual game is obvious in his *Foundation* series, as we shall see further on.

The Campbellian approach to topics through knowledge, intelligence, and reasoning instead of ray-guns is demonstrated throughout the logical puzzles of Asimov's robot stories and the background premises of his *Foundation* series (see also Aldiss 236). In Asimov's *Foundation*, "[v]iolence is the last refuge of the incompetent" (*F* 72), and his "social science fiction" rises from a genuine attempt at understanding the past, present, and future of humankind. At the same time, just as Campbell espouses the idea of manipulation of the masses for a good cause, writers like Asimov employ the same notion in their stories.²²

²¹ In addition to his editorials, Campbell makes his leaning toward utilitarian meritocracy blatantly clear in his letters, as when arguing: "It is NOT optimum to impose equal education on all; each individual should be educated in a manner that maximizes that individual's potentials" (*Campbell Letters Vol II* 413).

²² In 1950, Campbell was enthused over L. Ron Hubbard's "dianetics," although he broke with Hubbard only a year later and left the Dianetics movement before it became Scientology (*Memory* 586, 625). Asimov recalls Campbell's growing interest in parapsychology, "psionics," and various kinds of pseudoscience with increasing dismay. Asimov was disappointed by the increasing number of *Astounding* stories that "involved telepathy, precognition, and other wild talents," and Campbell's editorials "began to infuriate [him] with their ultraconservative and antiscientific standpoint" (669). In addition to their strong disagreements over racial prejudice and segregation, this seems to have been an additional factor contributing to Asimov's gradual move away from Campbell's vision from the mid-1950s onwards. Even if Asimov's later stories would occasionally include features like telepathy, his science fiction always has scientific explanations for these phenomena. Indeed, as we shall see in chapter 5, although the Gaia hypothesis inspired group consciousness in his 1980s novels may seem to point to parascience, the implication here, too, is that it is the result of science, biology, and engineering.

Genre and Context

Although *Astounding* developed in a more serious direction under Campbell's editorship, it never entirely escaped the traits of pulp fiction – nor did Asimov. Indeed, as we shall see, even as Asimov emphasizes “social science fiction” and the large spans of history, for the most part his characters play dominantly heroic roles within those historical movements, and he continues to use the same pulp-derived narrative methods. Asimov himself saw his straightforward style as a deliberate choice, and took pride in the clarity of his prose, which he considered free from burdens of symbolism (“Asimov's Guide” 202). Also, Asimov's general optimism as well as his trust in technology and in the benevolent manipulation of masses – including the way understanding history leads to expansion through guardianship – fit Campbell's bill perfectly.

As the following chapters analyze Asimov's recurring themes of history, frontier, and guardianship, this background, I hope, helps to contextualize these themes, by showing how his treatment of them in the span of his career also contributes to the development of the genre of science fiction.

CHAPTER 3

UNDERSTANDING HISTORY

[T]here is nothing in this world so permanent as a temporary emergency. (D.D. Harriman in Heinlein's "The Man Who Sold the Moon" 123)

This chapter examines the view of history conveyed in Asimov's *Foundation* trilogy and in its use of the narrative methods of historical fiction. In order to highlight the contribution of the trilogy to the concept of future history during the formative period of the genre, I compare Asimov's work and Robert Heinlein's Future History series, another key work of Golden Age science fiction that extensively conceptualizes (frontier) history as an integral part of its construction. Stories by both Asimov and Heinlein reflect the Campbellian spirit of the 1940s, and they frequently involve enlightened engineers, businessmen, and politicians, who actively shape history and bypass democratic processes. In doing so, they repeatedly convey a sense of history as a state of perpetual crisis where talented individuals must take active control of the course of events.

Many Golden Age writers were infatuated with the ideas of the Enlightenment, and under Campbell's editorship they presented streamlined versions of them in stories that often reflected Campbell's positivism and faith in the power of science and technology. The stories are filled with heroes of enlightened rationality, experiencing the power of the individual genius and the meritocratic and technocratic ideals, but this faith in science and rationality often seems to go hand-in-hand with cynicism about democracy and the rights of other (not as gifted) individuals (see Huntington 46). Indeed, Golden Age science fiction stories recurrently veered toward enlightened despotism. American science fiction has also been interpreted as taking the early twentieth century scientific discoveries as a source of power to fight against the seemingly impending chaos brought about by the social and economic upheavals of the 1930s (Berger 14–15).

Set at an early point in Heinlein's Future History timeline, Heinlein's "The Man Who Sold the Moon" (1951) becomes here the clearest point of comparison to Asimov. In this story, Heinlein creates a sense of urgency

through one character's vision of what is good for all humankind, and, in Heinlein's case, that good is often indistinguishable from individual profit-seeking in a caricatured world of *laissez-faire* market economy. In this context, much of Campbell's science optimism can be seen to navigate through the societal entropy and to maintain a precarious balance on the brink of chaos. Even as Asimov's series progresses rather optimistically from one solved crisis to another, it also exhibits an urgency to dispel that imminent collapse of society, and an awareness that things can easily slip into irredeemable destruction. This creates the need for authoritarian control that enables corrective action. Thus, Asimov, like Heinlein, explores various aspects of the motif of conspiracy or elite control, justified by the urgency of the historical situation (Clareson 30; Abbott 108; Palumbo 49–64).

In the *Foundation* series, the character of Hari Seldon is the purveyor of the perpetual urgency under which the Foundationers constantly work. In his recorded appearance at the Foundation "Time Vault" fifty years after its establishment in exile from the Galactic Empire, Seldon sets the stage for the crises to come:

From now on, and into the centuries, the path you must take is inevitable. You will be faced with a series of crises . . . (*F* 80)

But whatever devious course your future history may take, impress it always upon your descendants that the path has been marked out, and that at its end is [a] new and greater Empire! (*F* 81)

Seldon's message casts the Foundationers as "the seeds of Renascence and the future founders of the Second Galactic Empire" (*F* 80–81), whose destiny it is to save the whole of human civilization.²³ In his recorded appearances, Seldon repeatedly engages in these crisis-bound conceptualizations of his society's dynamics, and the Foundationers are thus immersed in ideas of an urgent duty to expand and redeem the rest of the galaxy. This becomes the ultimate justification for manipulations when characters like the politician Salvor Hardin and the businessman Hober Mallow rise to the challenge. When they do, they are frequently portrayed as the only ones to realize the state of urgency and the larger patterns of history.

²³ Hari Seldon's declarations of the Foundationers' promised land evoke both Moses and the Jewish exodus, and the ideological history of the United States, as discussed in chapter 4.

Understanding History

While Asimov's heroes assume power during states of emergency, Heinlein's heroes remain more ambivalent. Still, also Heinlein's very openly manipulative protagonist, D.D. Harriman in "The Man Who Sold the Moon," argues that he needs to be in control of the upcoming moon flights, because only he can be the moral guardian of the possibilities that they produce:

Handled right, it can mean a new and braver world. Handle it wrong and it's a one-way ticket to Armageddon. . . . I plan to be the Man in the Moon myself—and give it my personal attention to see that it's handled right. (Heinlein 146)

Both Asimov's and Heinlein's characters repeatedly assume responsibility over society and aim to guide all of humankind despite their personal interests. As Harriman puts it early on in Heinlein's story, "there is nothing in this world so permanent as a temporary emergency" (123). It is this urgency that calls for the "Great Men" of history to step up, and the narratives of both Asimov and Heinlein build on a conception of history which focuses on these figures.

The same theme also connects with frontier and guardianship in Asimov's larger *Robot-Foundation* series, which will be analyzed in chapters 4 and 5. The present chapter focuses on Asimov's original *Foundation* trilogy, which establishes the theme of historical developments, and sets it in comparison with "The Man Who Sold The Moon" from Heinlein's Future History series. In order to examine the comprehensive nature of Asimov's use of history in the series, I begin by analyzing how Asimov makes use of aspects of the historical novel to create the feel of a future historical novel and to convey the thought experiments integral to his work.

3.1 ON HISTORICAL FICTION AND SCIENCE FICTION

Most science fiction set in the future implies some history so as to explain how that future came to be. Indeed, history has been seen as "the trade secret of SF" because science fiction depends on an awareness of a possibility of progress, impossible without a sense of history (MacLeod 8–9). It has also been noted that calling science fiction "history" or "historical fiction" is a way of "drawing attention to the fact that science fiction stories are about the societal ramifications of change" (Abbott 5). In order to scrutinize Asimov's series as a work closely related to historical fiction, I first consider some aspects of historical fiction in general, and its relationship with science fiction

in particular. While future histories and historical novels share some features in terms of world-building and characterization, sometimes science fiction authors also deliberately emulate the narrative scaffolding of the historical novel to portray a future with an established past. The way that science fiction from the Campbell era builds a sense of historicity may often be rather sketchy, in part due to the relative simplicity of the pulp form and its requirements. But as the historical reference points are frequently made explicit in these works, they also focus attention on the ideas of societal change which, after all, are at the center of these works.

Georg Lukács's seminal study *The Historical Novel* from 1937 finds the value of the historical novel in its ability to extract the universality of historical processes by portraying their particulars. Lukács considers Sir Walter Scott a prime example of this, since Scott represents the individuality of his characters as derived from "the historical peculiarity of their age" without modernizing their psychology (19, 60). For Lukács, this kind of historical novel is above all a dialectical, critical form that emphasizes the difference between the time of writing and the time described in a way that yields insight into the historical forces that cause this difference, rather than simply making the history and the historical setting a backdrop. Lukács views the later developments of the historical novel, when it became more of a distinct genre of its own, as "pseudo-historicism, an ideology of immobility" (26), which distorted the representation of historical development. In this pseudo-historicism, the dialectic of difference and identity was lost as difference turned into mere "costume and decoration" (69), and historical identity was distorted by modernizations of the characters' psyche (19). Thus, true historical authenticity, which goes beyond antiquarian exotic detail, is for Lukács a pivotal feature of the dialectical historical, as opposed to the pseudo-historical novel.

Similarly, Harry E. Shaw, in *The Forms of Historical Fiction* (1983), detects a variety of historical fiction which makes history itself a central concern. For Shaw, one of the defining factors of historical fiction is its focus on the milieu represented and its "fictional probability," for him, it is central that historical fiction grants the reader access into a likely past (20–21). In Shaw's view, the main ways in which standard historical fiction has made use of history are "history as pastoral," where history provides a point of reflection for the present; "history as drama," where it is used to enliven the story (in both of these the work tends to consider more the author's present);

and finally, “history as subject,” where the work proposes to convey a view of history (52–53). According to Shaw, in order to bring the generalizations of historiography to life through the individual points of view, historical fiction should entail “a sociological sense of both past and present, a recognition that societies are interrelated systems which change through time and that individuals are profoundly affected by their places within those systems” (25). The notion of history as subject in both Lukács and Shaw thus resonates with Asimov’s “social science fiction” and the aspiration of Campbellian science fiction to portray the effect of scientific development on society.

Also starting from Lukács, Freedman, in *Critical Theory and Science Fiction*, argues that both the historical novel and science fiction share a “radically critical impulse” that entails a “dialectic of historical identity and historical difference” as the present of the text’s production becomes contrasted with the significantly different time where the text is set (54). Hence, Freedman considers “the dialectical freedom of the writer” in both genres to be “at a critical maximum” even though the historical novel differs from science fiction in that the former provides an alternative to the present in “a knowable . . . past,” while the latter usually locates it in the future and centers around the notion of cognitive estrangement (54). Crucial to this notion is that with both genres – the accuracy of forecasting in science fiction, or literal accuracy in historical novel – should not be taken as central. Thus, for Freedman, their “close kinship” lies instead in “establishing the historicity of the present” by showing it to be the “result of complex, knowable material processes” (56). Arguing that historical fiction and science fiction are tendencies which appear in a text alongside other tendencies, Freedman notes that they are frequently combined in worlds of science fiction so as to create the subordinate element of what he calls “disguised historical fiction,” which he exemplifies by Asimov’s *Foundation* (56).²⁴

While Freedman thus focuses on the way science fiction creates a sense of historicity for the reader’s present, in *The Seven Beauties of Science*

²⁴ Freedman notes that Asimov’s series “establishes an implicit contrast between its own present . . . and what are imagined as more swashbuckling, more affectively rich, stages in the past development of bourgeois civilization” (56). It seems to me that this can be extended to reading Asimov’s series as presenting a parallel of the history of the American nation (see chapter 4). In fact, I would argue that rather than a subordinate or disguised element, history in Asimov’s series becomes expressly the subject matter of the series.

Fiction, Csicsery-Ronay presents a view which gives more weight to the notion of forecasting. He also finds a close affinity between historical fiction and science fiction, but for him the way science fiction plays out myths of history becomes the crucial function, and in his view the main narrative strategy of science fiction is to employ “precise details and historical cause-and-effect relationships, recounted in the familiar voices of bourgeois subjects” in order to provide convincing images of life in the future (Csicsery-Ronay 76). For Csicsery-Ronay, then, science fiction offers narratives of a future that has already happened, in order to satisfy readers who “expect illusions of prophecy” (76). However, he points out that this imaginary prediction is not far removed from historiography, since historians commonly construct their narratives of the past as if it was present unfolding into the future, like “a prophet looking backward” (79). In Csicsery-Ronay’s view, science fiction thus “return[s] the favor” of Hayden White’s notion that historians construct their narratives along the lines of literary modes: science fiction in turn “adapt[s] the dominant models of modern historian, employing metahistories as their raw materials” (84). Science fiction mainly uses two such dominant models for narratives: “megahistories of the human species as a single great collective actor, and the personal histories of protagonists in a critical moment of that covering megahistory” (Csicsery-Ronay 82). In addition to taking history as its subject, Asimov’s work leans heavily toward recounting just this kind of megahistory of humankind.²⁵

In fact, Shaw’s notion of the centrality of history in historical fiction offers insight to Asimov’s work also on the level of characterization. As Shaw sees it, the character-driven narratives that historical fiction employs to depict historical trends easily result in one-dimensional and impersonal characters that are nothing more than emblems of societal forces. However, this also heightens the historical focus as the “characters become translucent to allow historical processes to shine through them more clearly” (Shaw 48–

²⁵ Also Jerome de Groot points out the parallel nature of historical fiction and science fiction. Basing his view on Darko Suvin’s definition of science fiction as “the presence and interaction of estrangement and cognition,” and echoing Shaw’s idea on the milieu as a distinctive factor, de Groot suggests that they both function through a “conscious interaction with a clearly unfamiliar set of landscapes, technologies and circumstances” (4). Still, as Asimov’s work rarely focuses on unfamiliar worlds or worldviews as such, the approaches to history as the subject matter become more central to my study.

49). Asimov, too, portrays his protagonists as instruments of history, much in the way of Shaw's "conjunctive" characters, whose "career [becomes] a commentary on historical process" (155). The lack of psychological depth in Asimov's characters is in part due to the conventions of pulp fiction, but it also emphasizes the Golden Age science fiction focus on ideas and thought experiments. Thus, in historical fiction and in science fiction, flat characters let the historical (or thought-experimental) focus come across more explicitly. As regards science fiction, it has been argued that instead of just a result of focusing on other things, the often flat and stereotypical characterization reflects the way "science fiction as a genre is centrally about the disappearance of character," and the fact that the genre frequently represents the "primacy of system over individual" (Sanders 132–133). As we shall see, Asimov's characters seem to both become emblems of large historical movements, but somewhat paradoxically, they also represent the drive to individuality as one aspect of those historical movements.

The science fiction works by Asimov analyzed in this chapter make use of elements of historical fiction to an extent that at times seems to even surpass their science fiction elements. As I see it, Asimov's *Foundation* series is a somewhat special case since it is deliberately framed as historical fiction written in the future. However, although historical novels and Asimov's kind of future historical fiction may share some generic repertoire (in Fowler's terms) and methods of narration, the objective behind the construction of Asimov's future historical novel is different from the historical novel. While historical fiction seeks to breathe life back into historical facts and make the past "recognisable but simultaneously authentically unfamiliar" (de Groot 3), the works analyzed here often make use of events from real-world history to construct a familiar structure for a world (and a time) that is by definition unfamiliar.

In order to follow Lukács's critical standard of historical fiction, as Freedman posits, science fiction should include characters that readers can relate to so as to create a feel of living in another time. However, very few Golden Age authors seem to think that the psychology of a character in the remote future should be represented as different from the contemporary, and even the more ambitious efforts at characterization rarely attempt anything more than a contemporary psyche transplanted on future characters. In this

sense, many of these texts end up as versions of Lukács's pseudohistorical novel (set in the future) and do not aim to represent any (future) historical identity. Another Lukácsian pseudohistorical distortion that can be detected in this kind of science fiction is the loss of critical difference, since the historical novel's potential to challenge history is discarded to "promote universalising tendencies," as de Groot terms it in relation to historical fiction (4). This leads to what Freedman considers "an undialectical and unhistorical fetishism of the (as-if-dead) past [where] the merely aesthetic relish of costume and exotic factuality triumphs over the genuinely critical issues of historical specificity and difference" (*Critical* 57). To be sure, science fiction has produced numerous gadget and adventure oriented texts that take an approach analogous antiquarian pseudohistorical fiction by using the future as mere backdrop for action-adventure stories.

Even if Golden Age science fiction rarely challenges its own narratives and thus does not tend to take on a critical form in the sense of Lukács's historical novel, Asimov and Heinlein do more than simply fortify the consensus view of history, when they extrapolate how historical movements turn out in different conditions.²⁶ Rather, they make use of the narrative models of historiography, as suggested by Csicsery-Ronay, and focus on metahistories that they employ through reiterations and analogies of specific moments in history.

In Asimov's work, the battle between historical determinism and free will becomes thematized and a part of the characters' conscious undertaking. In fact, Asimov employs it to underline the situation in the Foundation universe where the science of psychohistory makes it possible to determine the individual histories of the characters so that freedom of action seems to evaporate. In this sense, the *Foundation* series is a rather straightforward illustration of the view of history as flux as it projects a world where humanity is a mechanically determined thing that can only proceed in a certain direction (see Shaw 34).

Let us now consider the narrative methods Asimov employs to create this sense of historicity for his series, and the view of history that he conveys, as promoted also by Campbell in his editorials.

²⁶ Noting the similarity between story of future and historical fiction, Gunn thinks that Asimov goes for "verisimilitude of feeling over the verisimilitude of language or of character, just as a historical novelist . . . might choose the flavor of the original over a literal representation" (38).

3.2 CAMPBELL, ASIMOV, HEINLEIN, AND HISTORY

In Campbell's view, science fiction could provide, by considering the societal changes brought about by scientific advance, "for a science-based culture . . . a means of practicing out in the no-practice area" ("Place of SF" 17). In his editorials and critical writing, Campbell constantly emphasized the predictive aspirations of science fiction and presented it as a field for thought experiments that were highly relevant to contemporary society (20). In this way, Campbell fostered a sense of science fiction as a literature which, in the words of Csicsery-Ronay "addressed audiences who felt they had an immediate stake in the technosocial disruptions that were remaking a world" (Csicsery-Ronay 81). Through the more conscious and knowledgeable focus on history – like that of Asimov's "social science fiction" – the 1940s Golden Age science fiction came to challenge Gernsback's science fantasy adventure of the 1920s and the 1930s, and in the process created also more lasting stories (MacLeod 8–9).

At least in hindsight, Asimov claimed to have very consciously aspired to combine historical fiction with science fiction to write a "historical novel of the future, a science fiction story that *read* like a historical novel" (IA 116). From the start, Asimov based his series on Edward Gibbon's *History of the Decline and Fall of the Roman Empire* (1776–1789), and Campbell soon demanded from him a whole saga that would chart "the fall of the Galactic Empire, the Dark Ages that followed, and the eventual rise of a Second Galactic Empire" (IA 117). As a result, Asimov's *Foundation* trilogy came to establish the Galactic Empire as a self-evident fixture of science fiction. Earlier pulp adventure stories that stemmed from the British and other colonial situations had also abounded in empires, and similar ideas of a galactic-scale empire in science fiction were present already in space operas like E. E. "Doc" Smith's *The Skylark of Space* (1928) or *Galactic Patrol* (1937–1938). But Asimov's approach was decidedly historical and focused on the social and historical workings of the declining empire, instead of making it a mere exotic backdrop. This historical approach opened vast conceptual possibilities, turning from the analogies of Roman history to analogies of the American history of expansionism and speculations on the significance of frontier in the American development (see chapter 4).

As I have noted, I use Heinlein's Future History series as a touchstone to discuss Asimov's work, because they both highlight the spirit of the Campbell era in writing science fiction with an encompassing historical vista and a frontier

ethos. Heinlein began his Future History series by drafting a timeline of future events that he modelled on the history of American expansion, thus projecting the frontier past rather directly onto the near future (see also Samuelson 32–63), often exaggerating certain aspects of the American frontier mythos (and ethos) to satirical proportions. In short, Heinlein’s future history progresses from “The Crazy Years” of the 1940s European collapse and “considerable technical advance” in the United States to space exploration consciously modelled on American frontier expansion in “opening of new frontiers and a return to nineteenth-century economy” (*The Past Through Tomorrow* 660–661). This, in turn, leads to “Imperial Exploitation” and develops through “revolutions,” “extreme puritanism,” and “religious dictatorship” to the “[r]e-establishment of civil liberty” and the “[r]enascence of scientific research,” which enables yet another move toward the stars (661). Populating this outline with mostly independent and only loosely connected stories, Heinlein created a fairly pluralist mosaic-like view of the future history of human advance into space.

It was in fact Campbell who coined the term *future history* in his *Astounding* editorials, envisioning Heinlein’s outline as a “common background of a proposed future history of the world and of the United States,” thus positing a vision where science fiction novels were “historical novels laid against a background of a history that hasn’t happened yet” (*Astounding* March 1941, as quoted in Abbott 4). The same March 1941 issue of *Astounding* where Heinlein’s sequence of stories started also published his chart that was even in layout similar to the timelines in history textbooks by not only outlining the stories to come, but also reinforcing the deliberate sense of historicity. Perhaps as a result of this initial planning, however, most of the “history” in Heinlein’s series is present only in the background and offhand references, ultimately providing a vista of future history through individual characters and local concerns. Thus, his works connect to the historical past and present often through detailed references to the commercial exploitation of American frontier history as well as satirical exaggerations of capitalism and political manipulation (Tucker 189–190).

In contrast, Asimov’s series offers encompassing sweeps of future history which unfold as a continuous story, and transmit the sense of a mythical grand narrative of all humankind, employing an encyclopedic view akin to Gibbon’s

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History. Asimov's work, too, includes political manipulation and plutocratic plotting, but, in his series, they are represented more explicitly as societal trends. His stories employ characters who take an active role, as they not only try to understand the past but also seek to transform that understanding into action. Despite focusing mostly on one character per story, Asimov's series creates a panoramic view of the history of a changing society. While Heinlein focuses on individuals at crucial points in his future history, Asimov's grand narrative covers the future history of all humankind and thematizes the very idea of individual action within larger societal forces.

Still, both Asimov's and Heinlein's series rely heavily on authoritarianism, which, as we saw in chapter 2, was a commonly acknowledged strain in Campbellian science fiction (see e.g. Easterbrook, Kilgore, and Abbott), frequently considered to be based on social Darwinism and a reliance on meritocracy (P. E. Smith, Tucker, McGiveron, and Berger). Such ideas are activated and justified in these novels and stories by the Enlightenment-inspired necessity of contemplating history and societal dynamics. But as that contemplation often seems to result in impending crises, I maintain that these stories share an unspoken assumption that the state of urgency justifies emergency measures and postpones any serious consideration of slower, more democratic options to reach solutions that would lead to the survival of humankind as a whole.

CREATING THE NARRATIVE FRAME AND ITS LAYERS: THE EFFECT OF ENCYCLOPEDIA GALACTICA

The techniques of creating a historical narrative frame for the *Foundation* trilogy can be seen by focusing on the level of form and discerning how elements of composition contribute to this narrative effect. The first and the most visible attribute of the narrative's simulated historicity are the *Encyclopedia Galactica* quotations, which open many of the chapters in the *Foundation* trilogy and provide supposedly historical background information on the characters and the events. Although the *Foundation* stories were read for their massive sweeps of future history even in the magazine versions, by adding the *Encyclopedia* quotations into the book publication Asimov highlighted his historical approach. The quotations contribute to making the *Foundation* series into a historical novel of the future by inserting additional temporal

layers in the narration and imparting a sense of a historical novel that builds on thousands of years of thoroughly researched future history.

On the surface, the *Encyclopedia* quotations add to Asimov's series what Stockwell calls the narrative device of "documentary fragmentation," one of the "linguistic special effects" of science fiction (56–57), which was not uncommon even in 1940s pulp fiction. The technique provides a way to introduce new elements of the fictional world while furnishing the work with a certain scientific (or factual) appearance. It is also a way around extensive passages of exposition that present the unfamiliar fictional world at the expense of forwarding the plot, a common problem in much of early science fiction. Unlike some more modern texts that employ documentary fragmentation to invite the reader to question the narrative, in Asimov's case, the technique mainly functions as straightforward exposition.²⁷ However, the *Encyclopedia* quotations also impose another time frame on the narrative and create a narrative framework much like that of a historical novel. This is evident as Asimov adds a footnote after the very first of these quotations:

*All quotations from the *Encyclopedia Galactica* here reproduced are taken from the 116th Edition published 1020 F.E. by the Encyclopedia Galactica Publishing Co., Terminus, with permission of the publishers. (F 9)

This initial footnote, recurring in all of his novels which employ the *Encyclopedia* device, clearly places the moment of narration in a different time than the events narrated, creating a triple temporal structure. First, there is Asimov as the 'implied' author writing and publishing in the cultural context of the United States in the 1940s. Second, there is the narrator who tells the story somewhere in the distant future, after the publication of the *Encyclopedia Galactica* 1020 F.E. Finally, this narrator uses the *Encyclopedia* quotations as aids to narrate the level where the events in the actual plot take place. In order to be able to write about the future as the past, Asimov thus explicitly transfers the time of narration from his present to a point even further in the future than

²⁷ In terms of narrative devices, Asimov's series is a typical example of the rather conservative approach that Csicsery-Ronay detects in the epic world-building and the "conventions of circumstantial realism" often used in science fiction as a way of tackling the new conditions that would easily be completely unintelligible without some familiar frames of reference (82).

the future he imagines. However secondary to the actual plot, the footnote and the *Encyclopedia* quotations give the series a sense of embedded narrative, and add to the impression of observing the flow of galactic history. This results in a move away from Asimov the author to the events narrated via a point in the extreme far future, so that he can make the narration into something that creates the effect of a historical novel, with the events described being removed several hundred years into the past from their point of narration.

Thus, the narration transports the plot into the mythical past of the fledgling Foundation “nation” much as American frontier history has become a part of the American national mythology and the topic of countless action-adventure stories. Even if such nation-building myths are based on historical reality, this reality is at the same time so thoroughly fictionalized that scholars of the American frontier narrative, like John G. Cawelti in *The Six-Gun Mystique Sequel* (1999), need to constantly remind their readers that frontier life was very different from its fictionalizations. On the other hand, then, the footnote at the beginning of Asimov’s series announces that the fiction is allegedly history, as it sets the narration to a point in time almost a thousand years after the events. But adding the *Encyclopedia* excerpts also removes the rather wooden characters and scientific positivism far enough from the fictional present of the narrator to acquire the aura of a mythical past, a past which professes to tell the history of a nation or civilization.

For example, the *Encyclopedia* excerpt that opens the chapter “The Traders” blends the language of factual encyclopedic style with the thrills of action-adventure and the imagery of the now mythical American frontier past. It evokes James Fenimore Cooper’s pioneer stories and later pulp Westerns by describing the traders as “in advance of the political hegemony of the Foundation” in their wagon-like ships that were “nothing more than patch-quilts of home-made repairs and improvisations,” and their pragmatic mentality as that of the cunning pioneer heroes on a mission where any means necessary will be used to survive: “their honesty was none of the highest” (*F* 141). The mythical heroes of the Foundation history are defined by their fictionalized versions in a way that directly mirrors that of the American cowboy hero: “Tales without end are told of these massive, lonely figures . . . It is difficult to tell which tales are real and which apocryphal. There are none probably that have not suffered some exaggerations” (*F* 141). As the *Encyclopedia* excerpts construct this layer of ‘national’ mythology, they also

emphasize Asimov's sweeping vision of history and add to the complexity of the series by focusing attention on how history works and how national myths like American pioneers and cowboys are created.

For the most part, the excerpts from *Encyclopedia Galactica* are followed by the character-focalized narrative which rapidly moves on with the plot. However, in a few instances, the narrative attracts attention to the craftedness of the story by the added fictional layer of supposedly having been written in the future. This happens when the narrator's point of view approaches omniscience: an *Encyclopedia* quotation opens the chapter "Search by the Mule," but immediately after it, the narrator begins to directly discuss the quotation and implicitly addresses the reader:

There is much more that the Encyclopedia has to say on the subject of the Mule and his Empire but almost all of it is not germane to the issue at immediate hand, and most of it is considerably too dry for our purposes in any case. (*SF* 13)²⁸

Even if such a technique certainly serves the need to find new ways of summarizing the plot so far, it also distances the narration from the story – the "issue at immediate hand" – and emphasizes the added temporal layer that the narration creates. This narrator-focalized interlude intercepts the narrative by a comment that is in tone like a lecture discussing how the writer of the *Encyclopedia* entry "conceals" any "astonish[ment]" at the colossal haste with which the Mule rose from nothing" (*SF* 13). The narrator goes on to note that because of the irrelevance of the quotation, "[w]e therefore abandon the Encyclopedia and continue on our own path for our own purposes and take up the history of the Great Interregnum" (*SF* 14). By using such expressions, the narrator focuses attention on the way the focalization here shifts drastically from the characters to the narrator himself and the purported audience of

²⁸ Notably, the opening of this chapter is the only occasion where Asimov uses an early version of the *Encyclopedia Galactica* device also in the original magazine version. The story is "Now You See It –" (*Astounding* Jan 1948), and the quotation is supposedly from "Essays of History" by a fictitious historian, "Ligurn Vier." In fact, Asimov had used the same fictitious historian and his essay to open the short story "Blind Alley" (*Astounding* March 1945), which is loosely set in the Foundation fictional universe. Still, Asimov never connected this story to the larger series, even if it seems to be the origin of his idea of fictional footnotes. In the book form publication of the *Foundation* trilogy, the quotation from "Ligurn Vier" in "Now You See It –" is, then, transformed into an *Encyclopedia Galactica* quotation with only minor changes to underline the continuum of the stories (*SF* 13).

the future historical novel he is allegedly writing. This pinpoints the narrator and the fictional far-future point at a time when the Second Galactic Empire is already established, and from which point the events narrated are in the past, thus causing a temporary change in the tone of the narrative and further emphasizing the theme of historicity.

The original magazine publication employs another device in the form of an editorial addition, probably added by Campbell during his editorial process: a footnote in the November 1949 issue of *Astounding* points the reader to a source of background information by noting: “If a more formal and slightly longer version of the history of the Foundation is desired, than is given in Arcadia’s theme – without the necessity of wading through the formidable and definitive ‘Essays on History,’ by Lignur Vier – reference may be made to the following stories appearing in earlier issues of this magazine. . .” (*Astounding* Nov 1949, 10). This footnote thus cheerfully blends references to the fictional historian Lignur Vier somewhere in the future with the actual issues of *Astounding* in the present, providing what may be the only occasion of this kind of playfulness in the publication history of Asimov’s series. The effect is twofold: while it keeps up the appearance of a historical novel of the future, it also disturbs its narrative frame by an external reference. As this moment hardly seeks to actually undermine or disrupt the narrative, it is just a brief playful moment of adding reference to (and presumably seeking to sell) back issues.²⁹ Nevertheless, the note also shows a willingness to play with the conception of writing a future historical novel, which conforms to Campbell’s idea of stories written as if they were contemporary stories in a future magazine.³⁰

²⁹ At times *Astounding* used footnotes also in other writers’ stories, but in mostly only to give information about the science or ideas that were behind the extrapolation in the stories, in keeping with Campbell’s notion that the stories had to be based on real science. Inserted fictional footnotes are even rarer.

³⁰ A second example of this kind of narratorial interference can be found in *Second Foundation*, which describes the telepathic communication of the First Speaker and his student: “Since, however, it is inherently impossible in a society based on speech to indicate truly the method of communication of the Second Foundationers among themselves, the whole matter will be hereafter ignored. The First Speaker will be represented as speaking in ordinary fashion, and if the translation is not always entirely valid, it is at least the best that can be done under the circumstances. . . . It will be pretended, therefore, that the First Speaker *did* actually say, ‘First, I must tell you why you are here,’ instead of

Such changes in voice are not unknown in traditional historical novels which, in addition to documentary fragmentation, regularly employ long passages of exposition and on occasion may pause the narrative for authorial comments in the first person. In the *Foundation* series, however, such passages are rare, and the presence of this additional narrative frame is easy to forget – and perhaps often done so, because these interruptions do not greatly influence the whole of the work (see also Patrouch 93–94). However, together the footnotes, the *Encyclopedia* quotations, and the future historical novelist's authorial voice create a doubly fictional framework and the effect of delving into a well-established history and mythology of a future nation, which is then fictionalized in a historical novel written in that far future time.³¹ In a sense, the footnote and the quotations turn the actual story that tells about the characters of Hari Seldon, Salvor Hardin, and others into history at least as far in the past from the point of narration as, say, the characters *Ivanhoe* in 1194 are from Sir Walter Scott writing his novel in 1820. And even if this technique of placing dense informative sections into the narration is now a staple of science fiction, in Asimov's *Foundation* series it also creates a tension between the knowledge the characters have of their world, and the world and time of the narration.³²

In terms of the historical novel, de Groot sees history impose “an inflexible form within which the historical novel can explore the gaps” (84). For example, because relatively little is known about the inner lives of significant

smiling *just* so and lifting a finger *exactly* thus” (*SF* 110). This creates again a pause in the narration, stopping to directly explain the fictional world to the reader, but still in the voice of the narrator. Again, there is no mention of who this narrator is whose voice becomes so prominent for a while, nor what is its purpose for the story.

³¹ Touponce notes that the *Encyclopedia* refers to characters “finalized” as if they were already dead, and that Asimov drops this device only in his 1980s novels which connected more with the future as present than as past (102). This is the point where the narrative changes from future history to searching for a new future (see chapter 5).

³² David Brin's addition to the series in the final novel of the “Second Foundation Trilogy,” *Foundation's Triumph* (1999) also uses the device of the *Encyclopedia*, as well as other fictional sources to create the frame of a historical novel. Brin's application of fictional historical sources, however, seems to be much more deliberately in dialogue with the narrative than Asimov's use of similar devices. All in all, Brin's novel offers commentary on Asimov's series as it continues, and seeks to fill in the blanks and patch up problems, updating the ideas with chaos theory and other new developments in science.

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historical figures, historical novels are able to rather freely imagine them as protagonists. As we have seen, Asimov's series deliberately creates a sense of similar gaps in the history of its fictional world by the fictional paratexts like the *Encyclopedia Galactica* quotations. This makes use of the readers' assumed familiarity with the way the historical novel often employs different text types, and such rather small elements are enough to frame the story as historical fiction written in the future. It should be remembered, however, that even if this sounds rather like postmodern playfulness, Golden Age science fiction is rarely interested in deliberately attracting attention to its narrative devices. The focus is on the ideas, and the narration is a tool to explore these ideas, not the narration itself. When Asimov's and Heinlein's characters contemplate how history is made and then deliberately take advantage of their awareness of it, they do so within their respective fictional worlds, and in ways that moves the plot forward rather than challenging the form of the novel. Thus, even if science fiction may by definition be more self-aware than historical fiction because it is more clearly fictional, at least in these works of Golden Age, the role of fictional paratexts is still rather traditional.

In short, these authors were not yet interested in challenging the experience that they created through the realistic futures that Campbell wanted from them. They were, however, interested in the implications of historiographical ideas that they employed in the construction of their fictional worlds, which warrants further consideration.

ASIMOV'S VIEW OF HISTORY, GIBBON, AND ENLIGHTENMENT

Asimov's characters use their knowledge of history to more effectively manipulate and maneuver the present toward their desired future. This results in a pragmatic and utilitarian view of history and societal dynamics where history is knowledge, and knowledge is power, thus bringing about a direct need to learn from the past in order to construct the desired future. As we have seen, such an aim to actively steer the course of the future was present also in Campbell's editorials, where he envisioned for science fiction authors a role by which they would actively take part in shaping the future by writing about it. Campbell's technological optimism, positivism and cheerful can-do spirit saw the answer to societal challenges in the engineering of the future,

and thus approached that future through something like a modern version of the Enlightenment.

In Asimov's work, this begins as he models the *Foundation* series along the lines of Gibbon's *History*, itself a product of the age of Enlightenment. Gibbon viewed the "dark" Middle Ages as the result of the collapse of the Roman Empire, and believed that the history of Europe during that time was at a hiatus from which it was able to emerge and resume its due course only through the beginning of the Enlightenment. This notion of a "dark age" is transferred directly to the Foundation trilogy, and emerging from it constitutes the initial motivation for the action. As opposed to much of the earlier historiography, Gibbon's *History* is secular and pragmatic: there are no divine causes and history is all about human agency. Still, the effects of individual action are not always what the individual agents may have aimed for and the causal relationships may remain hidden from them. Thus, Asimov himself saw history as providing "a guideline to keep [him] from using ridiculous misinterpretations of what can happen, given people and their way of behaving" (qtd. in Patrouch 85), and Gibbon, in particular, fit Asimov's science-based worldview.

Even if Asimov constructs the framework of his series on Gibbon, there are also clear differences: Gibbon's view of history is pointedly unheroic, and the historical figures are often "deluded and even defeated" individuals whose actions do not have the effects they hope or imagine them to have (xxv). In this sense, Gibbon's approach is surprisingly modern. Asimov may, on a conceptual level, strive to present the insignificance of the individual, but he nevertheless ends up having the traditional larger-than-life heroes and "Great Man" figures as the driving forces of his plot, as discussed below. The influence of the pulp context and its associated hero characters pull his work in one direction, and his Enlightenment sensibilities in another. But rather than become an assortment of contradictory features, the series turns this into one of its strengths: it becomes a contemplation on the significance of individual action in the large movements of history.

Popular theorists of history in the early twentieth century, like Spengler and Toynbee, were drawn to sociology, philosophy, and mathematics, and the sweeping visions of Golden Age science fiction were often aligned with such inclinations. Although similarities between especially Toynbee and the notion

of history in Asimov's series can certainly be seen in the breadth of vision and the notion of cyclicity, it seems that there is no direct influence as such.³³ In Campbell's idealization, the science fiction novel seems to become a medium of historical-philosophical contemplation that proposes to see patterns in how human history works. Still, neither Campbell nor Asimov are really interested in history just for the sake of knowing the past, but for the sake of actively learning from it and contemplating possible future directions. Thus, when sociology and historiography are viewed through the science optimism of Asimov's time as if they were continuations of the natural sciences, the next step is to extrapolate that with enough data their underlying regularities can be discovered, and the future can be predicted. In the fictional world of Asimov's connected *Robot-Foundation* series, this reasoning has resulted in psychohistory, a complicated set of statistical sciences, which is used to steer the course of the future.

Samuel R. Delany places the Campbellian Golden Age in the historical context of discoveries by Einstein and others who showed that extensive scientific revolutions were still possible in the twentieth century. According to Delany, this "theoretical plurality" inspired a critique of the popular conception of science, and the resulting "fictive theoretical revision" challenged what modern science at the time considered possible (*Starboard* 221). As a result, trying out various views of history became in Delany's view another thought experiment and led to "historical plurality" in Campbellian science fiction, since it brought history and societal development into the realm of theories potentially to be revolutionized by new discoveries (*Starboard* 226).

There are, however, also more pessimistic interpretations. For example, Berger sees the works of Campbellian science fiction as exhibiting a worldview that desperately tries to oppose the decay implied by the Second Law of

³³ Toynbee cannot be said to have greatly affected the central premise of the trilogy, at least if we note Asimov's account of first reading Toynbee only while writing the second part of the trilogy. "The General" is the only story Asimov himself acknowledges as having been influenced by Toynbee (*Memory* 400). Altogether too much may have been made of the intended (and theoretically informed) cyclicity in *Foundation* (e.g. Elkins 99), since in addition to being ultimately not very convinced by Toynbee, at the time of writing the *Foundation* stories, Asimov apparently was also not aware of the work of other proponents of a cyclical view of history, like Vico or Spengler. James Blish's *Cities in Flight* series (originally published 1950–1962, partly in *Astounding*), however, is the prime example of a work explicitly based on Spengler's theories.

Thermodynamics, which dictates an inevitable descent into entropy. In his view, much of Campbellian science fiction becomes a futile attempt to fight against this impending chaos by authoritarian methods, and the works do not look as hopeful as they are presented in Campbell's rhetoric (Berger 14–15).³⁴ Still, at the same time as Berger makes an important point in criticizing the works of Campbellian Golden Age for its simplification of scientific and historical processes and the resulting authoritarianism, he also rather heavily-handedly concludes that “the ultimate inevitability of entropy made Campbell a determinist about human history” (17). As a result, Berger's own analysis largely downplays the curious tension between impending entropy and the stories' emphasis on “problem-solving, activism, optimism; hope . . . in the right kind of people to master their physical environment,” which Berger sees as mere denial of fighting a losing battle (17). After all, even if the solutions posited in Campbellian science fiction are at times meritocratic, authoritarian, and brutally utilitarian, they still represent the continued survival of humankind. What is more, while they betray distrust in the intelligence of the masses and often seem to view democracy as a hindrance to progress by scientific discovery, they nevertheless exhibit a certain optimism and belief in the human ability to come up with new answers in the future.

Asimov began his series by seeking to replicate easily recognizable patterns of historical events, and to emulate the narrative effects of the historical novel in order to write his Gibbon-based narrative of future history. Still, by blending the methods of historical fiction and science fiction in his notion of “social science fiction,” he emphasized the integral connection between history and societal change on a more profound level than the earlier action-adventure oriented space operas. In doing so, Asimov's series attempts to balance the future history which is modelled on the past with reflections of his contemporary society. As Asimov employs the models of the falling Rome and the American frontier, he essentially projects a fictional world which is bound to repeat history in ever-enlarging cycles. At the same time, and as his

³⁴ Berger criticizes Campbellian science fiction as “increasingly misanthropic and elitist” with a deeply rooted distrust in human faculties. This leads to authoritarianism because “the masses cannot be trusted to govern themselves” (32), and thus to “the forceful oppression of certain kinds of change, at least for all but an elite” (31). Berger sees this as a frustration arising from the attempt to reduce problems to their essentials in the spirit of the scientific method, when history or society cannot be so reduced.

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characters view history as a series of discernible patterns, their awareness of the workings of history becomes a key to how they act.

Still, because the characters frantically try to make use of their understanding of history, the series also projects the sense of urgently seeking for a new direction, with an implied view that there is a single course of history that will be best for humanity. In this respect, both Campbell's vision and Asimov's *Foundation* series are products of their time and can be seen as a part of the mid-twentieth century attempt to look for meaning and certainty. As such, they reflect the projects of seeking for large lines of development in the social-historical-philosophical treatments like those of Toynbee and Spengler.

Asimov's infatuation with the idea of enlightened engineers thus results in a tension between several elements that do not seem to fit together as easily as the grand narrative of humankind it purports to be. This repeatedly leads to dichotomies that exist in the tension between the historical conception that Asimov's works imply and the desire to write a historical novel of the future, between the historical cycles and the Enlightenment idea of progression, and between the Enlightenment freedom and the idea of guardianship, which becomes more prominent as his series progresses.

To further elucidate the sense of historicity in Asimov's work, promoted by the level of narrative construction and historiographical ideas discussed above, we will now take a closer look at the level of the content, that is, the stories that it tells in this way.

3.3 THE VIEW OF HISTORY IN ASIMOV AND HEINLEIN

As we have seen, the notion of history and the framework of a historical novel play a significant role in Asimov's construction of his *Foundation* trilogy. In the following, I analyze the view of history projected by Asimov's series on the level of the themes and characters, using Heinlein's work as a touchstone. The *Foundation* series exhibits constant tension between the individual heroic figures of the Foundation history and the impersonal forces of large societal movements. In comparison, Heinlein's "The Man Who Sold the Moon" seems more straightforward in its emphasis on the power of the exceptional individual to affect the course of history. But my claim is that both works base their conception of history on the motifs of urgency and the "Great Men"

of history, who rise to the task of managing the urgent situation, and who succeed by their ability to view history in a way that enables them to base their manipulations on it.

THE ENCYCLOPEDISTS AND FALSE ENLIGHTENMENT

While Asimov's *Encyclopedia* device creates the narrative frame of a future historical novel, the story which opens the original *Foundation* trilogy juxtaposes the Encyclopedists of the fledgling Foundation with that same society's budding political life at a critical moment. The opening scene of the original first story ("Foundation" *ASF* May 1942) – the chapter "The Encyclopedists" in the book version – shows the character of Dr. Pirenne of the Encyclopedia Committee "busily engaged at his desk" at the massive task of compiling the *Encyclopedia* (*F* 45). The Foundation Encyclopedists begin as a reflection of Diderot and the French Encyclopedists in that they are producing a far-future counterpart of that system of all knowledge, but it quickly becomes obvious that they are not the representatives of a genuine enlightenment movement. Not even Diderot et al.'s *Encyclopédie* was important merely due to the knowledge that it compiled, but due to what that knowledge could be used for. The compilers of the *Encyclopedia Galactica* cannot see further than their own niches, and engage in a sort of fetishization of knowledge where they cannot conceive for themselves of a greater achievement than to compile a "definitive Encyclopedia of all human knowledge" (*F* 47) by "classifying the work of scientists of the last millennium" (*F* 60), and producing compendiums of it "regularly like clockwork – volume after volume" (*F* 45). Reflecting Asimov's reading of Gibbon, the *Encyclopedia* project is analogous to how the medieval monasteries preserved the scientific texts of antiquity through copying, that is, putting religious and scientific texts on a pedestal. Dr. Pirenne himself is even represented as a caricature of a medieval monk, separated from the world and completely absorbed in his nearly celestial work of duplicating and anthologizing the works of ancient masters and authorities, complete with a "stylus [which] made the faintest scraping sound as it raced across the paper" (*F* 46).

The Galaxy-wide stagnation is further illustrated by the Old Empire's visiting ambassador Lord Dorwin and his medieval attitude to archaeology. Dorwin considers it the pinnacle of scientific method to study the "wuhks of old mastahs" (*F* 66), instead of studying the actual archaeological remains. In essence,

the Foundation, just as the rest of the Galactic scientific community, seems to have abandoned empiricism, one of the central premises of Enlightenment, and they do not really even make use of the information they gather.

In contrast to this, the young and energetic Foundation mayor Salvor Hardin becomes the embodiment of true Enlightenment as he uses both reason and the empirical evidence of his own senses. He is a cunning politician who has the enlightened scholar's knowledge but also the ability to use it, thus becoming a representation of the societal forces of frontier diplomacy and capitalism. This is the Golden Age version of a pragmatic and quintessentially American Enlightenment projected into the future with a self-confident, active, and solution-driven attitude. In effect, Asimov's fictional universe seems to turn on the notion that science becomes properly useful only when accompanied by brisk action that will shake the stagnated culture back into movement at the face of necessity. In the American historian Richard Slotkin's terms, it will be the regeneration through violence, one way or another (5).

WORLDS OF PERPETUAL URGENCY AND DETERMINISM FOR THE MASSES

As discussed at the start of this chapter, early on in Asimov's series the character of Hari Seldon establishes for the Foundation a sense of operating at a moment or crisis which dictates urgent action and justifies even "devious course[s] of action" on their way to a greater empire (*F* 81). Similarly, Heinlein's Harriman in "The Man Who Sold the Moon" argues that only he has the ability to make sure that space expansion is "handled right" (146), so he has to be in control and use all possible means to forward the cause as he sees fit.

Asimov's psychohistory entails that the social sciences are extrapolated into the realm of hard sciences, and history itself becomes a set of data that can be treated through the methods of the natural sciences. It becomes a utilitarian method of taking control of the human future history in order to minimize strife and try to provide the greatest good for the greatest number of people (see Miller 189–206). When Hari Seldon declares that "the path has been marked out," he brings in the notion of determinism,³⁵ and the

³⁵ Asimov himself noted in that one of his goals in writing the whole trilogy was to consider "the struggle between free will and determinism" (Ingersoll 70).

masses, or their freedom of action, are left in the background. Whereas Elkins sees Asimov's psychohistory as essentially distorting ideas of historical materialism into a cyclical conception of history (96–110), Freedman views psychohistory as reducing Marxism and Freudian psychoanalysis to nineteenth century positivism which assumes that the masses are completely passive, and leads to the "investing of all meaningful agency in an elite and aloof clerisy" ("Remembering" 133–134). Indeed, one of the "necessary assumption[s]" of psychohistory is that the human reaction to stimuli remain constant, otherwise the whole theory will not work (*F* 20).³⁶ On the other hand, Asimov's series acknowledges the problems of this reduction, and the recognition that human history cannot be simplified in such a mechanistic way sends Asimov on an elaborate course of trying to patch up the problems created by his previous solutions. Similarly, Delany notes that Asimov's series in fact adheres to the spirit of the scientific method when it seeks to address these problems in later stories, thus engaging in a dialogue with the ideas it presents in the earlier stories (*Starboard* 223–227). In Delany's view, the latter part of Asimov's original trilogy – the stories with the Seldon-Plan-disrupting character of the telepathic "Mule" who temporarily takes over the Foundation and begins building an empire of his own, and the scientific community of the Second Foundation who fix the Plan after him – questions this determinism and positivism, in effect delivering the two-part message that "history is intellectually negotiable but not deterministically predictable" (*Starboard* 223).

³⁶ Huntington argues that Asimov's notion of prediction is problematic because it reduces history to trivial abstract formula, to the effect that it "obscure[s] any actual historical insight and thereby argu[es] that the details of any real history do not particularly matter" (141–142). What is more, Huntington points out that by such denial of history, the rhetoric of supposedly apolitical technocratic view "dismisses conventional politics, but in doing so it becomes itself a political statement [and] looks to the future as a guide for choice in the present" (142). This is a perceptive analysis of the contradictions in Asimov's treatment of history in his *Foundation* trilogy, but instead of the validity of Asimov's notion of history as such, here I focus on the way Asimov's characters and plotlines turn the ability to understand history into a crucial method to guide future action. Contrary to Huntington, Leslie has argued that Asimov and Campbell question, rather than advocate, a strictly technocratic worldview and that they want to provoke discussion about the dangers of viewing the world as only "predefined equations" (Leslie 41–42, 64). However, it seems to me that it is Leslie's framework of reading Golden Age science fiction as cultural resistance (17–23) which produces this interpretation.

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However, all of this seems to overlook the point that history in Asimov's series is not entirely deterministic in the first place. If it were, all psychohistory could do would be to observe, not to affect the course of future history. Rather, Asimov's fictional science of psychohistory is above all a tool that will reveal tendencies and probable developments, and this knowledge is always used by someone to initiate some action. In fact, even in the first stories, where the protagonists do not have Seldon's science at their disposal, the mere knowledge of its existence (or their deduction that some kind of a Plan must exist) becomes enough to initiate history-steering action. These initiating agents – almost always an elite of a few men – retain their freedom of action and they can determine where society is headed. Their actions may effectively result in determinism for the masses, but as the narrative focalizes through the power elite and never properly through a member of the masses, the masses remain in the background and the active individuals in the foreground. Thus, Asimov's series comes close to Heinlein's Harriman, a much more straightforward representation of an exceptional individual giving his "personal attention" (146) to seeing that things are handled the way he knows best. Heinlein's characters hint at potential moral issues with this manipulation, even if they also cheerfully accept Harriman's actions, but as Asimov's fictional world is ultimately dictated by rationality, and the benevolence of this guarding elite is corroborated by their reliance on science and reason, there seems to be no effective need even for a discussion on their morality. Furthermore, such a power structure is present even in the early stories where the power elite operate without applicable knowledge of psychohistory. Even there similar layers of hidden elite control are apparent, and rather than positing that there is no way to affect the course of the future, this possibility exists but can only be accessed by the very few of a highly select elite, and even they have to struggle to succeed.

Thus, these works exhibit a tension between the two conceptualizations of history Tom Shippey detects in much of science fiction: the "Malthusian" idea that society is bound by technical and economic forces invisible to the individual, and the "mythopoeic, hero-making" idea that history progresses purposefully and with definite agency toward a present that is superior to the past (6–8). While this develops into a more pluralistic view as the narratives of Asimov and Heinlein progress, *Foundation* implicitly and "The Man Who

Sold the Moon” explicitly emphasize individual actors who are able to take advantage of the Malthusian forces of society by their own rational ability.

As such, it is not uncommon to view history as a progression from a crisis or other major event to another.³⁷ Hayden White has noted that like any narrative, historiography tends to formulate the historical record according to a plotline that entails a progression of events (30), often moving from rising action to crisis and resolution. Indeed, it is also this tendency to construct a dramatic arc into historiography that increases the tendency to understand history in terms of crises or conflicts.

THE GREAT MEN

In the Foundation universe, which Asimov begins as a transposition of Gibbon’s account of the crisis and collapse of an empire into the future, crises are not only a way to conceptualize history. Rather, the way the Foundation history moves from one crisis to another becomes the deliberate operating principle of psychohistory, and a way for Asimov’s pragmatic, enlightened individuals to manipulate the future history of humanity.

Especially the early part of the *Foundation* series becomes a sort of a paean to the frontier speculator, robber baron, and merchant prince characters who begin building the nation on the frontier. In Asimov’s series, the actions of such characters are easily justified through the urgency set by Hari Seldon’s speech, and even though they do not possess the same knowledge of the future as Seldon, they earn their place among the heroes of Foundation history. Their impetus is essentially that of Thomas Carlyle’s “Great Man Theory,” according to which “the history of what man has accomplished in this world, is at bottom the History of the Great Men who have worked here” (Carlyle 4). This idea was popularized in Carlyle’s *On Heroes, Hero-Worship and the Heroic in History*

³⁷ For example, Hegel noted that “periods of happiness are blank pages” in world history (26), hinting at the tendency to dramatize history through conflicts and crises in narration. For Hegel, the proper subject matter of historical studies was “those momentous collisions between existing, acknowledged duties, laws and rights and those contingencies that are adverse to this fixed system” (29). In this way, Hegel considered politics a factor that tied together history. This focus on affairs of the state and momentous events dominates also Asimov’s *Foundation* series: it is much about politics and very little about the way people feel when they live through those times, as seen in the section below. Indeed, this is something that Asimov briefly comments on in his 1980s novels, as noted in chapter 5.

(1841), and seems a central background assumption in Asimov's series. The same is apparent also in several of Heinlein's works where a few minor characters in "The Man Who Sold the Moon" even directly refer to Carlyle.

In addition, the pulp context of both Asimov and Heinlein brings in the notion of heroic individuals, and along with countless others in that tradition, they shape the course of history in a way that resonates with the convention of the "universal hero," as analyzed by Joseph Campbell in *The Hero with a Thousand Faces* (1949). The three stages of what he calls a *monomyth* are "a separation from the world, a penetration to some source of power, and a life-enhancing return" (*Hero* 35).³⁸ Such a mythical hero was "the founder of something – the founder of a new age, the founder of a new religion, the founder of a new city, the founder of a new way of life" (*Power* 166–167), and Asimov's Great Men can be seen taking on much the same role. As regards American history, then, just as there is a universal mythic structure of quest in the specifically American cultural myths of "settling the West" and "manifest destiny" (Mackey-Kallis 17), the Great Men of Asimov and Heinlein become the realizers of a mythical quest as they transform not themselves but the world around them through the *escape – initiation – return* formula.

Thus, however crucial the individual characters are, Asimov seems to consider them as instruments of the process of history. Both the characters of Asimov and Heinlein share traits that Lukács views central in, for example, Sir Walter Scott's work: that the "great man in history was not important in isolation, . . . but as the representative of important currents in popular life" (72). Asimov's protagonists, while they are portrayed as the prominent figures of their time, are also emblems of the societal forces at work. Indeed, writing "a history about people who make things happen" (Gunn 35), rather

³⁸ As Joseph Campbell sees it, the hero's journey is part of the "cosmogonic cycle," the universal round of "the continuance of cosmic order . . . assured only by a controlled flow of power from the source" (*Hero* 261). The cyclical nature of the hero's quest is apparent in the ancient Greek myths where the hero successfully goes through the quest and brings the back a boon for the benefit of the society. After some time, however, this former hero may become a tyrant, or the boon a problem, thus creating a need for a new hero to perform a new quest. While the quest of the hero is a universal myth which appears in some form in most cultures, local variations of myths are often bound to a given specific culture and time. Just as to Vladimir Propp's view of the morphology of the Russian folktale, the order of the elements of the hero's quest will remain much the same, even if some of the elements are omitted in the local and temporal variations of the mythic structure.

than people who just go along with the flow, Asimov's narratives show Great Men steering the course of history exactly because they embody the societal forces of pragmatic, forward-looking dynamism. Patrouch reads the early Foundation stories as "*deus ex machina* stories in which the resolutions came about as historical movements rather than as the result of actions and desires on the part of individual human beings" (87). It seems to me, however, that especially the first part of the trilogy portrays its protagonists as so attuned to the historical movements that their wishes and desires coincide with the course of history. This focus results in a view of history that consistently emphasizes the action of individuals despite the fact that the premise of the series, a history plotted out in advance, would seem to contradict this. As the end of this chapter will show, Asimov presents the idea of the futility of individual action at the face of historical forces only in the second part of the trilogy, *Foundation and Empire*, but even there seems to also hold on to the Great Men view.

In the *Foundation* series, Hari Seldon is the ultimate Great Man figure as the developer of psychohistory. The chapter "The Psychohistorians" in *Foundation*, which opens the book-form publication of the series, shows Seldon prophetically mapping out the course of the First Galactic Empire's decline, with the certainty of a man with a vision and plan calculated by the scientific accuracy of "the developed mathematics of over eighteen years" (*F* 27). When Seldon is put on trial to answer accusations of rousing rebellion against the Empire with his predictions, he is "unperturbed. . . the only spot of stability remaining in the world" (*F* 28). He is the purveyor of "scientific truth [which] is beyond loyalty and disloyalty" (*F* 29), not a puppet of the crumbling empire that challenges him. The way the preoccupation with Great Man figures ties in with the notion of genius, frequently present in science fiction of this era (see Huntington 44–68), is evident in the character of Seldon. He is the lone scientist who, through his invention of psychohistory, is critically aware of the "delicate moment in history" (*F* 34) and of "both the present status and the past history of the Empire" (*F* 33). It is this awareness that leads him to eventually become a founding father of a new nation and a figure of historical importance.

However, while Seldon's messages may inspire the masses by casting them as the protagonists of a magnificent future, they provide no actual

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guidance. Rather, a split is formed between those few who understand and control Seldon's science, and the many who know of its existence but have no access to its workings, viewing it as a matter of predestination. Only a handful of the latter, protagonists like Salvor Hardin and Hober Mallow, who know that a Plan exists but not much more, are able to use their intellect to distance themselves from what seems pure magic or predestination to others. Repeatedly in Asimov's series, the Great Men are found among those who are not mesmerized by the scope of history laid before them, but are able to place it in the world of reason and take action to forward the Foundation's expansionist mission.

Similar aspirations can be found in Heinlein's protagonists, too, but his characters also portray a sense of the capable individual's right to take personal advantage of the situation. In "The Man Who Sold the Moon," Heinlein tells the story of organizing the first, at this point fictional, moon flight, and the numerous deals and manipulations, which the businessman-protagonist D.D. Harriman carries out in order to make sure that he is the first to land on the moon and take it into his possession. At the end of the story, Harriman does not even get to the moon himself, but what he does accomplish is the beginning of an era of space frontier expansion. P. E. Smith (137–171) and Tucker (172–193), among others, have discussed the social Darwinism apparent in many of Heinlein's works, and it seems evident that even if Heinlein's stories provide an optimistic view of the possibility of human development, they also open the door to narrowly defined meritocracy and justification of authoritarian control by the "fittest."³⁹ The adoration of Machiavellian heroes who become significant historical figures through their courage to act upon their vision is clearly present in the character of Harriman. At first, he seems a capitalist robber baron on "the greatest real estate venture since the Pope carved up the New World," ready to strike a deal that is "like having Manhattan Island offered to you for twenty-four dollars and a case of whiskey" (Heinlein 132), and

³⁹ For McGiverson, in contrast, Heinlein's social Darwinism is "not a celebration of mindless expansionism, but, consistently, a call to arms to those who would remain free; he espouses justifiable defense rather than rapacious offense" (54). In his view, Heinlein's "idealism and pragmatism temper each other" and produce solutions of mutually tolerated existence instead of purely socially Darwinist "mindless predatory organisms" (54). Thus, McGiverson has a much more positive view of Heinlein than critics such as P. E. Smith and Tucker, who have accused him of elitist libertarianism bordering on fascism.

operating with a *savoir-faire* where “the use of bribe money is a homeopathic art” (140). At this point, Harriman is the fabled American entrepreneur-turned-tycoon with a “Midas touch” (134), who makes use of virgin land rhetoric and frontier parallels only to further his business interests. However, as he reveals his larger nation-building vision by explicitly comparing it to the history of American independence and the notion of establishing a free state on the Moon, his plan is shown to be more than a mere plutocratic daydream. Thus, Harriman becomes the lone hero who understands the situation and now his greater goal justifies all his manipulations:

I’m going to see this thing developed, not milked. The human race is heading out to stars—and this adventure is going to present new problems compared with which atomic power was a kid’s toy. The race is about as prepared for it as an innocent virgin is prepared for sex. Unless the whole matter isn’t handled carefully, it will be bitched up. (203)

Harriman himself is somehow the only one who is not naïve: as a self-appointed guardian/first lover, he will ease the virgin humankind safely into an adulthood that it will find in transforming the untouched land of the space frontier into an established society.⁴⁰

As is clear from Harriman’s comparisons, both Asimov and Heinlein depict a thoroughly male-dominated fictional universe – unsurprising considering the time and context of writing. Even though Asimov has some strong-willed heroines, they are not elevated to the same mythical nation-building class as Hardin or Mallow. In particular, the character of Susan Calvin in the Robot stories is a figure whose work may influence the course of history in the larger *Robot-Foundation* series, but she represents individual rational genius rather than a societal – let alone feminist – force. Similarly, Arcadia Darell in the final story of *Second Foundation* is something of a protagonist and has some of the breadth of vision of the great figures of Foundation history, but she is also a teenager who lives at a time of a thoroughly suburbanized Foundation, when the mythical heroes are in the past and everything is much more mundane. With her adolescent longing for the mythical times of Hardin

⁴⁰ Mogen (37–38) further discusses Heinlein’s sexual metaphors for Harriman’s “top bossing” in connection with the anticipation of exploiting the virgin land.

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and Mallow,⁴¹ she later becomes an author of historical novels. It could be argued, then, that this is once again an indication of how women in Asimov's fictional world never become actual makers of history, only write romances about it. Bayta Darell, Arcadia's grandmother, may get to steer the Foundation history by thwarting the Mule's plans in *Foundation and Empire*, but even her actions are mostly represented as intuitive rather than based on deliberate planning.

As Harriman's business partners debate his status as a frontier entrepreneur-cum-Carlylean hero, Heinlein's story is filled with conscious and explicit contemplation on the analogies between the actual past and an imagined future. Comparing Harriman to "the last of the Robber Barons [who] opened up the American West," his employees see him as "the first of the new Robber Barons" and make an explicit reference to Carlyle and "the 'Hero' theory" (Heinlein 185).⁴² In doing so, these minor characters are spokesmen for the historical significance of both the situation of opening the space frontier and the role of individual Great Men. Still, because Harriman's business partners are themselves not adept enough to become the historically significant rulers described in Carlyle's hero theory, they stay on the "merry-go-round" set in motion by Harriman's manipulations and simply forget their concerns of this tycoon "setting up new imperialism" (186). Even this much deliberation on the side-effects of manipulation is something of an exception in these stories, as they frequently idolize the robber baron figures as the new Western entrepreneurs. The scheming may be devious as such, but the characters turn into heroes when they contribute to the development of the frontier nation.

Harriman operates in a knowable present with all the possible resources of information and wealth at his disposal, but Asimov's Foundation mayor Salvor Hardin has to rely entirely on his own rational ability. His story is set in

⁴¹ "I've read books and books about all the great men of Foundation history. You know, like Seldon, Hardin, Mallow, Devers and all the rest. I've even read most of what you've written about the Mule, except that it isn't much fun to read a history where the Foundation loses. Wouldn't you rather read a history where they skipped the silly, tragic parts?" (*SF* 142).

⁴² There was a revival of interest in Carlyle's work in the 1930s, also in the United States, although in the 1940s the association with fascism made him again rather unpopular (Gross 30–31).

a time of utmost urgency when the Foundation's existence is threatened by the surrounding kingdoms, and in this situation Hardin becomes the first of the Foundation Great Men to begin establishing it as a nation of its own. Hardin is empowered by his own ability and vision as he starts working toward Seldon's goal by piecing together information about psychohistory and Seldon's objectives. Whereas the Foundation Encyclopedists passively wait for a "*deus ex machina*" (F 73) of the Old Empire's influence or Seldon's calculations to resolve their problems, Hardin takes an active role, realizing that "we must work it out ourselves" (F 75). At this point he seems to be the only one with at least an inkling that there may be a greater future toward which they should be heading, reproaching the Foundation scientists for passively relying on "authority or the past – never on [them]selves" (F 74). Hardin's pragmatic self-reliance simply brushes aside any paralyzing awe that Seldon's plan might evoke, and gets to work. Hence, Hardin is very much a product of the 1940s American pulp science fiction. Although more subtle and refined in his morals than Harriman, he is the lone hero figure who saves the day when no one else can. He is distinctly above everybody else in his reasoning and courage, daring to challenge a seemingly overwhelming enemy by the force of his intellect alone. Hardin reclaims his destiny through action, even if he also embraces Seldon's mission for the future.

The nineteenth century Carlylean hero worship may seem rather anachronistic for 1940s American pulp science fiction, but the heroes in both Asimov and Heinlein are part of the more general traits of the heroes in classical epics – some of the same epics in which Joseph Campbell traced the journey of the universal hero. As Carlyle's hero theory applies the traits of heroes from ancient epics to historical figures, and history becomes one of the key themes in the works of Asimov and Heinlein, it is perhaps not very surprising that history is introduced through the "Great Men" of the new world, now modelled as an application of the Carlylean ruler heroes. At the same time, the relatively static nature of Asimov's characters in the *Foundation* series produces a contradiction: They resonate with Joseph Campbell's monomyth and go through motions which typically cause some change in the archetypal heroes, but, as Asimov's characters are the Great Men who possess a strong sense of mission to begin with, they need go through no transformations. As so often in Asimov, the characters whose actions change the world remain

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themselves mere representations of the societal forces rather than show any individual development – even if, paradoxically, individualism is one of the forces that they represent.

In both Asimov and Heinlein, however, the actual justification for why some particular individuals should be in control seems to be mainly that they rise to the challenge, and are somehow responsible enough to see to it that in addition to accumulating their own wealth, they benefit society as a whole. As Kilgore notes, “[i]n Heinlein’s narratives, the right to control new lands and wealth is conferred according to one’s standing in a meritocratic hierarchy” (95, see also Elkins 105). The same is true of Asimov’s characters, whose actions are justified by their awareness of the workings of history, and their ability to take advantage of them. This position is authorized by the language of Puritan election (Slusser 96–98; Kilgore 94), even if it in fact is election by capitalist prowess. Hence, Heinlein’s Harriman, too, becomes the lone hero who directs humanity. In the words of Kilgore, Heinlein’s “wonderful dream of new frontiers and American renewal . . . is authoritarian even as it professes a rhetoric of egalitarian individualism” (95). This tension between individual freedom and authoritarianism and between self-serving exploitation and enlightened guardianship is ever present in Asimov and Heinlein.

In his analysis on the body of Heinlein’s work as “incessant focus on the single individual and his world” (99), Slusser notes a factor which seems the key to the difference between Heinlein and Asimov. While Asimov uses individual heroes as emblems of forces that move the society onwards and create the future history, for Heinlein the actual (exceptional) individual and his preservation are much more significant. As Slusser points out, Heinlein’s work exhibits a “preoccupation with endlessly extending the material line of a single existence” (108n), as in his Lazarus Long stories. Although Asimov’s future history is often criticized for the stylized and interchangeable characters, it is precisely the emblematic nature of his characters which contributes to creating the sweeping narration of the large historical movements and societal dynamics. What is more, Asimov’s heroes are distinguished from Heinlein’s by the way they more easily accept the limitations of their personal existence, and also step down from the seat of power.⁴³

⁴³ An exception of sorts is the robot character R. Daneel, who first appears in Asimov’s 1950s novels *The Caves of Steel* and *The Naked Sun* and is brought back in his 1980s additions to

USING HISTORICAL AWARENESS FOR MANAGEMENT AND MANIPULATION

One of the central faculties of Asimov's and Heinlein's Great Men seems to be their ability to turn an understanding of the historical context into practical action (see also Berger 19). This comes across as the necessity for expansion to retain cultural vitality, and is related to Frederick Jackson Turner's "Frontier Thesis" in Asimov (discussed in chapter 4). In Heinlein's "The Man Who Sold the Moon," on the other hand, it appears as a promotion of space travel in a readily familiar package with easily exploitable connotations of national mission and virility.⁴⁴

Asimov's Hardin becomes a Great Man through his ability to self-reliantly deduce the Foundation's status in history and to take advantage of it, but even more so through his ability to develop a comprehensive view of the Galaxy's history. Passages that merge Hardin's voice with the narrator's provide glimpses of historical movement reminiscent of history textbook rhetoric:

And now that the Empire had lost control over the farther reaches of the Galaxy, these little splinter groups of planets became kingdoms – with comic-opera kings and nobles, and petty, meaningless wars, and a life that went on pathetically among the ruins. (*F* 86)

This description of the declining Galactic Empire has evident affinities to Gibbon's *History*, and Hardin seems to view the world at least momentarily from an omniscient perspective, far above the details of the history in which he participates. Such passages portray the Foundation leaders at Hardin's time as being on a mission that is much more far-reaching than their present moment, a mission where history becomes a scientific problem which they observe and steer from afar on their way toward Seldon's promised land of the Second Galactic Empire. Hence, Hardin often comes across as an outside

the series as a godlike entity with his 20,000 years of existence and guardianship over the galactic history. However, being an Asimovian robot, he will never consider himself more important than the humanity which he guards, but he also represents the ultimate rational ability: a self-evolved guardian of all humanity.

⁴⁴ The frontier as a safety valve in Turnerian terms has been detected also in Heinlein's work (see Tucker 178).

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observer of the history unfolding before him, even when he steers it himself. In an ironic aside, Hardin reveals that he has studied psychology and wanted to become a “psychological engineer, but we lacked the facilities, so I did the next best thing – I went into politics. It’s practically the same thing” (*F* 62).

Hardin uses this historical awareness and psychological eye to become an expert manipulator and he sets up a religion where science is portrayed as supernatural, in order to control the kingdoms that threaten the Foundation during the first two Seldon crises. Hardin realizes that the surrounding kingdoms have receded in their knowledge of science to a point where they revert to superstition at the face of unfamiliar technology, much in the way that ancient nature religions took forces of nature for gods to be appeased. Using this knowledge, the Foundation fabricates a science religion to subdue the “barbarians” who do not realize they are dealing with a technology-aided masquerade. As nuclear power plants and other Foundation technology are fashioned into sacred objects of the religion and run by Foundation-trained “priests” (*F* 92), they gain control and systematically engineer the experience of the sublime for the masses.

Adhering to his motto “Violence is the last refuge of the incompetent” (*F* 90), Hardin manages by covert manipulation, not brutal action. He defeats the threat of the surrounding kingdoms by cunning:

I played them against each other. I helped each in turn. I offered them trade, education, scientific medicine. I made Terminus more valuable to them as a flourishing world than as a military prize. (*F* 91–92)

Hardin becomes one of the Great Men to establish the new nation by relying on his ability to understand the bigger picture, which in this case amounts to cynically exploiting his awareness. As religion has always been a way to control masses, he turns science into religion, but retains his noble motives because he is on a mission sanctioned by Seldon, and is thus justified in trampling whatever individual rights to achieve the greater good in the long run.

Heinlein’s Harriman, on the other hand, is in the thick of things since he is constantly arguing for space frontier expansion that mirrors the American expansion, and his success lies in maneuvering the obstacles set up by the government and its regulations. The story gets much of its drive from following Harriman’s increasingly imaginative manipulations, as he sets

up his venture by bribing, lying, and bending the letter of the law. The key, however, is the portrayal of Harriman as a character so aware of history that he consciously aims to repeat the frontier myth of American history on the Moon. In a sense, the *novum* of the story is Harriman's ability to reiterate the American frontier myth as a marketing tool for space exploration, but also to implement unrestricted power capitalism in doing so: as he puts it, "[c]onquering space has long been a matter of money and politics" (129). All in all, the cheerful tone of Harriman's manipulations paints a cynical caricature of the economics of the nineteenth century American expansion and early twentieth century power capitalism. In addition to manipulation, Harriman is the vigorous entrepreneur turned hero by managing teams of engineers who will make things work: "I'll hire the proper brain boys, give them everything they want, see to it that they have all the money they can use, sweet talk them into long hours – then stand back and watch them produce" (131).

In this respect, Harriman is a very different kind of a hero from the classic science fiction inventor-action heroes like E. E. Doc Smith's Dick Seaton in *Skylark of Space* (1928), who is a superman both in intelligence and physical action. In Heinlein's story, Harriman's heroism lies in his managerial skills to remove the hindrances that hold the engineers and other innovators back and prevent them from achieving their greatest potential. This entails Campbell's notion that the world needs people like Harriman with a vision and an ability to remove the limits of bureaucracy – after which the rest will almost happen on its own. Harriman is the heroic maneuverer who succeeds through his ability to take advantage of the world as it is, instead of trying to change it. He may be a visionary, but he can hardly be a consistent moral anchor for the future that he builds.

Asimov's characters are rather serious compared to Heinlein's merry pack of new frontier robber barons, with the possible exception the trader characters like Hober Mallow in the *Foundation* chapter "The Merchant Princes." Mallow embodies the same historical vision and awareness as Salvor Hardin, and his ability for management and manipulation, resembling that of Heinlein's Harriman, is central in the latter half of the novel. After the first steps in frontier survival represented by Hardin, the Foundation turns to more active conquering through commerce. Mallow is a purely capitalist businessman with no pretensions, "Money is my religion" (*F* 184), he says,

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and is ready to guide a potential customer through “the workings of dummy corporations” (*F* 187) to seal a deal. As a reference to Gibbon’s representation of medieval European merchant princes and the popular “robber baron” image of the Wild West entrepreneurs, the character of Mallow also becomes a symbol of the socio-economic forces that guide the Foundation toward its future, in this case in the leadership of self-interested men. Mallow becomes another Great Man in Foundation history by retaining his position as a “free agent” (*F* 210) and a lone hero, “the only man who knows how to fight the crisis” (*F* 222), which justifies the use of any means necessary. Indeed, Mallow’s robber baron heroism has the same ambivalence as Harriman: he is doing what advances the greater cause of the Foundation, but he will also to make the most profit on the maneuverings that lead to it. Thus he represents a capitalist version of Hardin’s motto: “Never let your sense of morals prevent you from doing what is right” (*F* 141).

Even though the Foundation mayor’s secretary, who becomes Mallow’s adversary, criticizes the provincial Mallow for not having the “sense of destiny” (*F* 232) of the Foundationers, by the end of the story it is clear that Mallow is the one with a greater sense of the historical forces at play. He is able to turn the situation in the Foundation’s favor through his vision which is more than just a passive sense of destiny. However, in this case taking action ironically means doing nothing but letting the current crisis run its course, making sure that no offensive action is taken against the kingdom of Korell that threatens the Foundation with war. By his historical awareness, Mallow understands what will happen when the Foundation cuts the trading connections with them:

The whole war is a battle between . . . the [old] Empire [which supports Korell] and the Foundation . . . To seize control of a world, they bribe with immense ships that can make war, but lack economic significance. We, on the other hand, bribe with little things, useless in war, but vital to prosperity and profits. (*F* 231)

Knowing that “people endure a good deal in war,” Mallow aims for a stalemate during which the Korellians will be met by accumulating everyday annoyances as the Foundation-sold technology begins to fail, and the public dissatisfaction leads to their eventual surrender (*F* 229).

By this capacity for encompassing vistas of social movement, much like those of Hardin, Mallow solves the crisis, and this is the redeeming factor of all

his brutal economic manipulation which in itself does not make him look like much of a hero. Paradoxically, but typically for the series, even though Mallow knows that “Seldon crises are not solved by individuals but by historic forces,” his manipulations to gain power so that he can make sure that historical forces are left to run their course, amount exactly to such “brilliant heroics” (*F* 228). The fact that in the larger scheme of things Mallow and Hardin are very consciously working for the greater cause, gives a Campbellian moral justification to all the admiration of clever manipulation in the first part of the *Foundation* trilogy.⁴⁵

By the end of “The Merchant Princes,” Mallow has established himself as yet another autocrat in the Foundation history, and so far the strongest manifestation of frontier commercial survival and ability. Only at the end of Mallow’s storyline is there any concern about the ultimate capitalism, similar to Harriman’s business partner’s musings about setting up a “new imperialism” (Heinlein 186). Mallow’s right-hand man retorts: “you’re establishing a plutocracy. You’re making us a land of traders and merchant princes. Then what of the future?” (*F* 233). But even more than for Harriman, plutocratic manipulation is for Mallow only a method for achieving the greater goal, and in the end he is ready to hand over the responsibility and step down from his position of power as soon as his solution to forward the Foundation future is carried out:

What business of mine is the future? No doubt Seldon has foreseen it and prepared against it. There will be other crises in the time to come when money power has become as dead a force as religion is now. Let my successor solve those problems, as I have solved the one today. (*F* 233)

As James Gunn has noted, the philosophy of history that one can extract from Asimov’s work is that change is the only permanent thing, and “one generation’s solution is the next generation’s problem” (36). By having the character of Mallow state as much himself, Asimov emphasizes his protagonists’ ability to consider the mechanisms of affecting the course of history, and their awareness of their own roles in it.

⁴⁵ At times, this does lead to serious ethical problems, as in *Second Foundation* where the destruction of a whole planet is allowed, leaving “many millions to die” (84) in the name of inevitability as a plot gimmick (see Patrouch 95).

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Throughout his literary career, Heinlein was trying on and testing out different outcomes of a variety of ideologies. As Kilgore notes, he was “not so much a systematic philosopher or prophet as he [was] a literary broker of the problems, alternatives, and solutions that continue to preoccupy American culture” (88). Acknowledging the plurality of Heinlein’s production as he “mirrors the contradictions of the society around him” (Kilgore 88) would seem to be the key to perceiving the satire behind the rather extreme ideological stances in some of the narratives in the Future History series. Still, even in his more moderate stories it is difficult to ignore Heinlein’s contempt for democratic processes in the actions of the Great Men who know what is best for the country and need the freedom of action to do their work. Indeed, this seems to be the unifying aspect of many of the different ideas he presents to his readers. Heinlein is at times uneasily walking the line between satire and libertarian jingoism, and much more than in Asimov, in his work the sense of urgency is created through one character’s vision of what is good for all humanity – often indistinguishable from their profit-seeking actions in a caricatured world of laissez-faire market economy. Regardless, also in “The Man Who Sold the Moon” the ability to understand and make use of history at a moment of urgency becomes a key component of the story. On the whole, Heinlein seems to assume a clear connection with particular historical contexts and is interested more in the immediate future as it arises from the present.

Both Asimov’s and Heinlein’s stories exhibit the typically American active optimistic pragmatism of Campbellian science fiction that solves the problems and masters the environment once “the right kind of people” are given freedom to work, but it also betrays the view that someone needs to use power over others for the sake of general well-being (Berger 16–17). The theme of elite control develops as the general public is repeatedly shown to be, as Berger notes, “ill-informed, prejudiced, and more than willing to follow the manipulative leadership of nearly anyone egotistical enough and sufficiently skilled to step out in front of the crowd” (20). As these works often take this social dynamic as a given, they represent authoritarianism not only as a practical, but also as a moral answer: if the masses blindly follow authority in any case, it would be irresponsible to let the less capable assume the authority (see Easterbrook 53). Recurrently this amounts to a willing surrender to the idea that you cannot change the flow of history and still be personally

successful, but you can maneuver society in a direction where it was headed in any case, and accumulate personal success on the side.

While the parts of Asimov's and Heinlein's series discussed here focus on the power elites as they maneuver their respective societies through their first steps in frontier survival and expansionism, both series also feature characters that are not part of the elite, at least not to begin with. For example, Heinlein's *Future History* includes characters like the naïve would-be frontier hero in the story "Coventry" (1940), and the unfortunate lawyer in "Logic of Empire" (1941) who ends up on the oppressed side of the expansionistic society. At first, these stories seem somewhat critical of the division created by the authoritarian urgency of frontier management. However, this criticism is brushed aside as the protagonist of "Coventry" reaches a meritocratic redemption of sorts by accepting responsibility and aspiring to become a part of the power elite. Also "Logic of Empire" ends up undermining its critical potential: the lawyer protagonist tries to turn attention to the horrors of the slavery that he has managed to escape, but is treated as a fool for refusing to see that slavery just happens to be a "necessary" part of building an empire. Even in those of the *Future History* stories which focus on smaller-scale incidents, the society depicted is built along authoritarian and meritocratic lines, and the difficulty of emerging from the underside of society is an important way of validating the individual's ability. This is evident, for example, in "Misfit" (1939), where an awkward and uneducated working class protagonist turns out to be a mathematical genius who saves the day on a military-run construction site of the space expansion. Here, the individual's own extraordinary ability distinguishes him from the masses and grants potential access to the elite. A society ultimately run by an elite is pointedly present also in Asimov's series, even in "Search by the Foundation" in *Second Foundation* (originally published in December 1949 and January 1950 *Astounding* under the title "—And Now You Don't"), where the teenage protagonist Arcadia Darell seems to succeed in helping to defeat the hidden power elite of the Second Foundation. However, also this story ends with the elite firmly in power, with a revelation that the First Foundation's seeming victory is only bluff designed to let the Second Foundation continue its hidden control. Now let us consider the only story in Asimov's original *Foundation* trilogy that turns its focus from the power elite to the forces of history.

**ASIMOV'S EMERGING CONTRADICTIONS: GREAT MEN
AND THE FUTILITY OF INDIVIDUAL ACTION**

According to Asimov, his main motivation behind writing the *Foundation* trilogy was to illustrate “the opposing forces of individual desire and that dead hand of social inevitability” (Ingersoll 70). However, throughout the first novel, *Foundation*, it seems that the course of the Foundation is governed primarily by heroic individual acts. Indeed, it is not until the stories of the second novel, *Foundation and Empire*, that Asimov finally seems to attempt to demonstrate the insignificance of individual action at the face of large sociological developments. In this way, he also sets out to upset the premeditated course calculated for humankind in the Seldon Plan. “The General,” the first half of *Foundation and Empire* (originally published as “Dead Hand” in April 1945 *Astounding*), juxtaposes the futility of individual action and the forces of history which reflect a strong sense of nationality and destiny. Although here, too, individual characters aim to create history, the would-be Great Men are confused and frustrated as their action seems to have no impact.

In “The General,” the heroes receive a tragic aura by their powerlessness as they are directed by the “dead hand” of “Psychohistorical necessity,” unable to achieve a similar control over the destiny of the Foundation as the earlier Great Men. In this story, Asimov makes the point of the power of societal change that proceeds without any specific leader figures. The Foundation masses share a sense of nationality infused with “universal optimism” (*FE* 28) about their future greatness and role as the saviors of humankind, and the Seldon Plan now seems to be progressing even without powerful individuals. In a sense, it is as if the nation has outgrown the daring heroics, which can now be only useless frantic action that has no effect.

The first of Asimov’s tragic heroes in this story is Bel Riose, described as “young and energetic . . . and curious besides” (*FE* 11), and deliberately modelled on Gibbon’s representation of the Byzantine general Belisarius and his youthful resourcefulness.⁴⁶ Bel Riose is the best man that the declining Empire can offer, but there is also a sense of impending doom about his career much like that of Belisarius, who was recalled from battles apparently for

⁴⁶ Gibbon viewed Belisarius as one of the last heroes of the lost greatness of the Roman Empire: “daring without rashness, prudent without fear. . . . By these virtues he equaled or excelled the ancient masters of the military art” (*History* 570).

having been too successful and thus a threat to the throne: “After the second victory of Belisarius, envy again whispered, Justinian listened, and the hero was recalled” (Gibbon 569). Bel Riose, too, is ruined by his success: “Riose won victories, so the Emperor grew suspicious” (*FE* 85). Riose starts as a potential Great Man of the Old Empire: his acute sense of the need to fight for what he considers the right cause is similar to that of the early Foundation heroes. He sees the old Galactic Empire as the agent of peace and civilization that must be protected, and believes in the “great services” it does to humanity as “a force of peace and civilization” (*FE* 29).

At this point, the leaders of the Foundation that Riose attacks have also become old and stagnated: “With forty years of expansion behind them . . . The epic days of Hardin and Mallow had gone and with them a certain hard daring and resolution” (*FE* 20), but the common people believe in the Foundation’s continuous growth and supremacy. Riose’s expeditions to the Foundation territory reveal the growing self-confidence of a new nation, “a people so proud and ambitious as to dream quietly and methodologically of Galactic rule” (*FE* 27).

Riose takes as his guide an old rebel, Ducem Barr, who tries to convince Riose of the inevitable Foundation destiny: “Not all the might of the Empire could avail to crush this pygmy world” (*FE* 30). Barr views the Foundation as the Chosen Ones and in effect becomes the voice of the historical force that Riose tries to oppose. Even though Riose is aware of this, he is ready to “take that challenge. It’s a dead hand against a living will” (*FE* 31), thus setting himself up as a hero facing an impossible task. Like a character in a Greek tragedy, he is resolved to see it through, although he is aware of standing “clasped tightly in the forcing hand of the Goddess of Historical Necessity” (*FE* 31). He is doomed to fail because he refuses to acknowledge the destiny of the Foundationers, or accept the historical forces behind their success. Elkins takes this historical necessity as representing the inevitability of historical cycles in Asimov’s series (100), and indeed, this Foundation story finally shows a situation where the individual, however capable, is unable to steer the masses and/or social inevitability.

The Foundation trader Lathan Devers’s attempts to actively work in favor of the Foundation are just as ineffective as Riose’s are in attacking it, further emphasizing the futility of individual action for or against these large

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forces of history. Devers is a hero of both mental and physical action but has no choice but to try to influence things through the bureaucracy of Trantor, and suffers in “the horrible gloom of isolation and pygmyish unimportance” (FE 77). The character exhibits the same qualities as Hober Mallow, but his heroism receives an anticlimactic resolution toward the end of the story when he discovers that the Foundation war against Riose he was so frantically trying to maneuver to Foundation’s advantage has ended because Riose has been called back to the imperial center. The predetermined destiny has prevailed and the individual has made no impact on the outcome. The time of the Great Men seems to have passed. Thus, Devers, too, becomes a tragic figure as his heroism and frantic effort never amounts to anything, leaving him nostalgic of “the great leaders of past crises [who] did precious little more than sit – and wait. . . . but they knew where they were going” (FE 56). Devers comes to represent a kind of nostalgia for the all-powerful pulp hero characters, but for the first time in the trilogy, the scientist-like detachment from the individual lives affected by the course of history is broken by Devers’s anxiety over his powerlessness:

‘I’m tired of looking at this whole business as if it were an interesting something-or-other on a microscope slide. I’ve got friends somewhere out there, dying; and a whole world out there, my home, dying also.’ (FE 69)

Such frustration seems also a reflection of the 1940s, when Hitler was advancing in Europe seemingly unstoppably, and World War Two had started. The disillusionment with noble heroes was poignant at a time when the brutality of war made it apparent that one heroic individual makes no difference. In the next story, Devers’s fate is uncovered in a passing mention: he “died in the slave mines eighty years ago . . . because he lacked wisdom and didn’t lack heart” (FE 97). From this story onward, the trilogy becomes also emotionally more engaging as the stories acquire more typical, and emotional, adventure story elements, with slightly less emphasis on the broad sweeps of history.

While Devers and Riose both represent individuality and freedom to act, the old Siwennian, Ducem Barr, is the advocate of Seldon’s predestined future. Barr functions in the story as an explainer of the forces of history, but he also becomes a symbol of the faith of the common people of the Foundation: “There’s nothing to *do*. It’s all already done. It’s proceeding now. Because

you don't hear the wheels turning and the gongs beating doesn't mean it's any less certain" (*FE* 70). At the Foundation celebration after the old Empire has withdrawn its troops, Barr draws a conclusion about the forces of history which surpass individual action: "the social background of Empire makes wars of conquest impossible . . . Through all this wild threshing up tiny ripples, the Seldon tidal wave continued onward, quietly – but quite irresistibly" (*FE* 84–85).⁴⁷ In his interpretation, "There was a dead hand pushing all of us" (*FE* 85), in other words, the scientifically calculated destiny.

In terms of the parallel to American history, this rendition of the conflict between action and predestination could also be read as a representation of the nineteenth century tension between American freedom and individuality, and Calvinist views of destiny. In *Foundation and Empire*, then, Devers espouses Seldon's declaration, but it is Barr who comes out as the Puritan-like true believer who has internalized Seldon's message as a matter of faith: "I have no certainty for *my* people – only hope" (*FE* 70). Devers, on the other hand, cannot depend solely on faith, he "can't really work like that; not just like magic" (*FE* 70). Because Seldon has provided the prophecy of magnificent destiny, Devers's doubts about the omnipotence of Seldon's Plan are also doubts about the Foundation's destiny. The common people's reliance on the manifest destiny of the Foundation, their belief in Seldon's unstoppable Plan, has become a kind of religion in itself. Barr exhibits a similar understanding of historical forces as Hardin or Mallow, but he only uses it to explain the situation, not to affect it. As Asimov's series seems to divide its characters into two kinds of groups by their approach to possessing knowledge, the ones who understand and act, and those who understand but only explain, Barr clearly represents the latter.

In *Foundation and Empire*, the people of the Foundation have come to reflect a sense of nationality rather like that of the United States at the end of the nineteenth century. In the Foundation universe, this has been implanted in the people by the determinist propaganda which holds Seldon in its center as a

⁴⁷ Such passages illustrate Asimov's reading of Gibbon's History "not once but twice" ("Story" 62) as now the character of Ducem Barr becomes the mouthpiece for a Gibbonesque analysis of the crumbling empire: "Under weak Emperors, it is torn apart by generals competing for a worthless and surely death bringing throne. Under strong Emperors, the Empire is frozen into a paralytic rigour in which disintegration apparently ceases for the moment, but only at the sacrifice of all possible growth" (*FE* 84).

god-like figure whose all-powerfulness is taken as self-evident.⁴⁸ Although the noble hero figures are still present, their demise in the later stories illustrates the insignificance of individuals, no matter how heroic, when they try to affect the whole nation saturated with a strong sense of destiny and unity. Such heroes become tragic because they try to rely on their individualism and because they reject the collective destiny of the nation, or do not rely on it enough to let it run its own course. However, this sense of nationality is itself challenged in the stories that follow, as the Foundation is revealed as not the only one with a claim to that destiny.

DISRUPTING THE HISTORICAL MODEL – HEROICS GONE SOUR – HISTORY AS AN OBJECT

At the end of “The General,” the frustrated Devers warns the Foundation magnates of an impending civil war due to the discontent with the unequal division of wealth in the Foundation plutocratic rule. While it would fit the historical parallels, this plotline is never played out, since the Mule stories which follow were Asimov’s deliberate move away from the framework of Seldon Plan at Campbell’s request, presumably for dramatic effect (Gunn, “Interview” 42). Thus, the historical model is disrupted by a telepathic manipulator character in the story “The Mule” (originally published in 1945 November and December issues of *Astounding*), and the repercussions of this disruption and the Mule’s final demise are portrayed in “Search by the Mule.” As these stories break away from the Seldon Plan, they also largely abandon the model of Gibbon’s decaying Roman Empire. In terms of characterization, they are also a move away from the popular cowboy hero influences. The Mule stories are set in a phase of Foundation history which resembles Asimov’s own time more than the earlier Foundation stories did. While the trader stories were analogous to the romanticized times of the American pioneers and

⁴⁸ Just as in the early twentieth-century America, in the Foundation universe one of the vehicles of this propaganda is popular fiction with its overtly patriotic and conservative messages. Both Riose and Devers consciously consider themselves different from the “thriller” fiction of their time, for example Riose protests: “I am a soldier, not a cleft-chinned, barrel-chested hero of a subetheric trimensional thriller” (*FE* 52). At the same time, these features emphasize the Western-styled heroics in the stories, as discussed in chapter 4.

frontier expansion (see chapter 4), “The Mule” seems also to reflect the war and American home front anxiety during the World War Two.⁴⁹

In “The Mule,” Bayta Darell is Asimov’s first central female protagonist, and in view of pulp fiction’s stereotypical outlook on women, a fairly complex one.⁵⁰ In contrast to the usual female pulp characters, even if she does conform to the stereotypical mid-twentieth century housewife by cheerfully cooking for her husband, in this story it is Darell’s husband who becomes her sidekick, not the other way round. She walks among the men “like an equal” (*FE* 208), blending the Foundation’s medieval etiquette with emerging modern equality, and shakes hands “vigorously, man-fashion” (*FE* 146), as a sign of her self-assuredness.⁵¹ What is more, she gets to personify the voice of the history textbook in analyzing how a “Seldon crisis is pending” (*FE* 95) due to the maldistribution of wealth brewing up a civil war. As a concession to the pulp conventions, Darell is of high birth in the sense of being able to “trace her ancestry back to Mallow” (*FE* 90), but as the whole story tends toward realism, the heroism is downplayed, she sees herself as “no storybook spy”

⁴⁹ Although Asimov used also Tamerlane as a historical model for the character of Mule (Asimov, “Social Science Fiction” 180; Parrinder 85), and feels compelled in his autobiography to stress that the “Mule was in no way a Hitlerian character. . . . because the Mule was not a complete villain” (*Memory* 420), the parallels between WWII Germany and the Mule’s power-politics are strong.

⁵⁰ Susan Calvin in Asimov’s 1940s Robot stories (discussed further in chapter 5) is strong in her determination and intellect, but she seems more an amalgam of ideas than a complete character. This is something that also Asimov himself observes, considering Bayta Darell his “first successful, well-rounded female character” (*Memory* 415). It should be mentioned, though, that all of Asimov’s characters remain rather flat, in the sense of E. M. Forster’s famous distinction in *Aspects of the Novel* (1927) between flat characters (unchanging, one-dimensional, and usually defined by only a few traits, such as those of stereotypical pulp villains), and the round, multi-dimensional, convincingly surprising characters, usually the protagonists (46–54). From the start, Bayta Darell is strong-willed and pragmatic, and the surprise of her killing their friend Ebling Mis to prevent Mule from finding the Second Foundation does not entail any newfound depth in her character, but is rather a plot twist that the dramatic arc of the story requires. Even Arcadia Darell (discussed below), remains rather flat, in part because it is the large developments of the plot that are central in Asimov’s fiction, not character development or complexity.

⁵¹ Throughout the series, Asimov uses his characters’ hands to illustrate their characteristics (discussed further in chapter 4). His heroes always have a firm grip, and thus, Bayta is aligned with them in contrast with the well-meaning, but dandyish scientist Ebling Mis, who exerts in his handshake only a “careless pressure” (*FE* 146).

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(*FE* 121), and is not portrayed as engaging in actions as unproblematic as the previous heroes. Still, despite this move toward more realistic, human-size characters, she does become the hero, with her husband as her sidekick.

In contrast to “The General,” where individual action made no difference as to the course of history, “The Mule” returns to the individual level with the telepathic mutant, the Mule, who disrupts the history, but also with Darell who defeats him, thus also stopping the disruption by individual action. However, the story ends by highlighting the more realistic lack of glamour in the heroics. Bayta Darell, her husband, and Foundation scientist Ebling Mis have been searching for the Second Foundation to help them defeat the Mule, and along the way have rescued the court clown Magnifico, who has become a member of their party. At the resolution of “The Mule,” Darell uses her heroic intuition to deduce that the Magnifico is in fact the Mule, and has been telepathically pressuring Ebling Mis to use all of his capacity to discover the Second Foundation. Thus, in what feels like less than a heroic move, she kills their friend Mis before he reveals the location of the Second Foundation to the Mule.

In the same story, the Foundation captain Pritcher is a believer in individual heroism: “We’ve been blinded by Seldon’s psycho-history, one of the first propositions of which is that the individual does not count, does not make history” (*FE* 178). But his solution, to attempt to assassinate the Mule by a suicide bomb attack, fails. Just like Bayta Darell, Pritcher brings back the notion of individual heroism in the trilogy: now that the force upsetting the Seldon plan is an individual, another individual has to stop this. But Pritcher’s heroics are deflated as he gets caught and Mule’s viceroy tells him to “leave heroics for the fools who are impressed by it” (*FE* 181).

The Second Foundation finally defeats the Mule in “Search by the Mule,” in *Second Foundation*, and begins to restore the Seldon Plan. As they do so, they also reveal their role as guardians over the first Foundation, but it is not until the final story of the trilogy, “Search by the Foundation” that the series focuses on this power relation. After the Mule is defeated, the Foundation society moves from the need to actively understand history to fictionalizations of history in the character of the fourteen-year-old schoolgirl Arcadia Darell. The characters are now more realistic and the historical parallels seem to rise from Asimov’s own time: the late 1940s to early 1950s atmosphere of growing

American middle-class prosperity and democratic elections (*SF* 99).⁵² It is also a time when the era of mythical heroes who singlehandedly make a decisive impact on history is irrevocably in the past: “when the Foundation was young, the Traders were pioneers pushing back the frontiers and bringing civilization to the rest of the Galaxy. . . . But that time has passed. We don’t have traders anymore; just corporations and things” (*SF* 152). In the eyes of Arcadia, the whole Foundation is “a suburban town, a comfortable house, the annoying necessities of education” (*SF* 151). Arcadia’s school assignment also replays early twentieth century American patriotic rhetoric: “I think that our confidence in ourselves, in our nation, and in Hari Seldon’s great Plan should drive from our hearts and minds all uncertainties” (*SF* 99).

The other link to the early 1950s America is the presence of post-war fear and paranoia, as Arcadia’s father, Dr. Darell, and his group of Foundation scientists try to find and eventually annihilate the Second Foundation, whom they see as manipulators of their society. In this context, this plotline evokes a reflection of the “Yellow Peril” fear, the Japanese-American internment during the World War Two, and the continued distrust toward Asian population after the war, as well as a foreshadowing of the McCarthy era. In the end, the Second Foundation engineer things so that Arcadia’s father’s vigilante group think they have managed to destroy them and free the first Foundation from their guardianship (see chapter 5).

While Dr. Darell is a fairly flat vigilante scientist character, Asimov himself considered Arcadia his most well-rounded character at this point in his career (Gunn, “Interview” 43), and it is true that she is the least stereotypical female character in the trilogy, even if she is also something like the plucky adolescent heroines of girls’ detective adventure novels. From the start, she is described as a feisty fourteen-year-old with a lot of self-confidence, sharp wit, and equally sharp tongue. Even though her self-confidence is in part stereotypical teenage defiance, the unapologetic way she is able to see herself as “a great writer” in her adulthood who “would write all her masterpieces under the pseudonym of Arkady” (*SF* 93), implies that she is the most independent female character in Asimov’s trilogy. Thus, it would seem that as the times in

⁵² Arcadia’s name seems a pastoral allusion that emphasizes the Foundation’s arrival at a historical era of a more peaceful existence, comparable to the idyllic representations of postwar United States.

the Foundation world change from the simplistic, male-driven settler/trader society to a more democratic and equal suburban world, the characters, too, acquire more complex features. At the same time, Arcadia's self-assurance is essentially the same as with Asimov's powerful trader and frontier politician characters. She calmly engages in bluff and manipulation, but now the times have changed and instead of historical deeds and serious politics by the Great Men, these qualities earn her characterization as "a ferocious little romantic, . . . growing up in an unreal world of video and book-film adventure" and "a weird self-constructed fantasy of espionage and intrigue" (*SF* 188). Thus, the trilogy goes from representing heroes to representing people who are aware of the mythical status of those heroes, and long for the simpler and more heroic times.

The fact that Arcadia gets, according to her father, her "twisted notion of the great universe" from "historical fiction" (*SF* 141) also offers a comment on Asimov's trilogy itself. Arcadia says: "I'm going to write historical novels, you know. . . . Who cares about academic respect? . . . My novels are going to be interesting and are going to sell and be famous" (*SF* 142).⁵³ Although Asimov is ironical of Arcadia's rather childish and romanticized view of mistresses and lords, the rather simple pragmatic psychology that Arcadia attempts to use on her mission to locate the Second Foundation is much like that of the protagonists in the earlier parts of trilogy. Arcadia's heroism starts to disintegrate as she is first subjected to mindless bureaucracy and then the threat of being exploited when a ruler she tries to manipulate wants to replace his previous mistress with her. When Arcadia realizes she has encountered the menacing Second Foundation she is looking for, she becomes a terrified child again. Her notions of what a fictional hero should be able to do constantly clash with the actual situation, which is an ironic commentary on the plausibility of the pulp heroics: "It made her furious. In similar situations in the book-films and the videos, the hero foresaw the conclusion, was prepared for it when it came, and she –

⁵³ While Arcadia seems to understand the dubious academic credibility of historical novels, Asimov takes an even more ironical approach to historical novels in his later novels, as in *The Robots of Dawn* where a character scolds another: "You've been reading historical novels," to have them reply "Of course I have – and they describe it as it is" (*RD* 267). In addition, in *Robots and Empire*, one of the characters sees in another "the picture of a Puritan" she knows from "historical novels" and considers the Puritan villain "stereotype." Such notions seem to reflect some of the criticism Asimov received in the 1970s.

she just sat there. *Anything* could happen” (*SF* 160). Such self-doubt mixed with self-awareness makes her a more complex version of the future historical adventure hero than what the whole trilogy so far has displayed.

“Search by the Mule” shows the Second Foundation only in a few brief interludes as anonymous characters, in effect as mere disembodied voices that are planning the manipulations which result in defeating the Mule. But the final “Search by the Foundation” shows in more detail their role as the real guardians of the Seldon Plan. As the First Speaker of the Second Foundation teaches the intricacies of psychohistory to his student, the contrast between the calm and self-assured engineers of humankind’s (psycho)history and the futile scheming of the first Foundation is emphasized. What is more, the way the First Speaker and his student view the Seldon Plan using a device called “prime radiant,” turns the process of history into a kind of visual object:

[W]ith a gradually livening flush, the two long walls of the room glowed to life. First, a pearly white, unrelieved, then a trace of faint darkness here and there, and finally, the fine neatly printed equations in black, with an occasional red hairline that wavered through the darker forest like a staggering rillet. (*SF* 111)

In this way, opening the Plan as a picture-like visible object provides a moment of the sublime,⁵⁴ like a biblical moment of creation that starts with white light before the visual experience turns into the pastoral scene of a forest with rilletts. The “prime radiant” offers a magnificent view of the future from the safe distance of neatly printed equations that represent the flow of history – the Seldon Plan, and the “red hairline” corrections to the Plan, without the observer having to become entangled in the actual events. By viewing the flow of history in this way, the Second Foundationers can affirm their superior rational action. Rather than being paralyzed by awe at the vast flow of history, the observers of the Prime Radiant are quick to assert their own position and take control by their equations which turn history into an object that can not only be viewed but also manipulated and steered.⁵⁵

⁵⁴ For a more detailed discussion on the sublime in Asimov’s series, see Käkälä, “Enlightened.”

⁵⁵ Further on in the series, there are other brief occasions where the Seldon Plan is viewed as a visual object where the “flow of history” in the pattern of the equation can literally be seen (e.g. *Edge* 103).

The original *Foundation* trilogy ends with an atmosphere of triumph shadowed by paranoia on the First Foundation's part. Again, individuals attempt heroic actions, but they are no longer the heroically successful Great Men. At the same time, the guardianship of society is no longer operated by clearly visible and historical exploits, but by the hidden guardianship of the Second Foundation. As the users of psychohistory, the Second Foundation are the actual force behind all development, and their relation to history and active guardianship of society is discussed in chapter 5. The individual heroics return in Asimov's 1950s Robot novels *The Caves of Steel* and *The Naked Sun* with the character of Elijah Baley, whose detective work expands into laying a foundation for humankind's expansion into space, as discussed in chapter 4. Individual heroics are very much present also in Asimov's 1980s additions to the series, where two robots become the godlike guardians of the whole galaxy in *Robots and Empire* and the character of Golan Trevize decides the fate of the whole galaxy in *Foundation's Edge*. These developments will be discussed in chapters 4 and 5.

3.4 CONCLUDING REMARKS: CYCLES OF HISTORY AND GREAT MEN

In this chapter, I have discussed how Asimov makes use of the framework of the historical novel and argued that a Carlylean conception of history as acts by Great Men leads in Asimov's work to narratives that focus on the management skills and ingenious ways of manipulation devised by future robber barons and merchant princes. The *Foundation* trilogy projects worlds where history is made in backroom deals by power elites that, at least ideally, work for the benefit of the masses. It seems that the tendencies of authoritarianism and determinism in Asimov's science fiction are a blend of Enlightenment ideals, positivism, and optimism in terms of scientific advance, tempered with cynicism about the nature of human government and history. The crisis-centered and authoritarian-steered conception of history and societal dynamics enables the Great Men to take control, but it also forces them to work tirelessly to find the most effective ways of managing the course of humanity. Such dynamics may carry implications of deterministic conceptions of history, but although it has sometimes been viewed as a sign of pessimism

and cynicism about history and government, Asimov's Campbellian heroes nevertheless take the historical dynamics as an exhortation to do all they can to steer society toward what they view as the best course for everyone. The centrality of Asimov's kind of power figures is also a more general tendency in Golden Age science fiction which changed the focus from Carlyle's kings and emperors to scientists and businessmen, who, as the Great Men of the future, steer society like enlightened engineers.

Although the story sequences of both Asimov and Heinlein take a historical approach, at the heart of Asimov's work is an idealization of a rather solemn Enlightenment spirit, while Heinlein's stories are more pluralistic and at times parodic. Heinlein focuses on individuals in future historical settings, making his stories more character-driven, explicitly America-centered, and more directly tied to contemporary issues. Asimov's series, taking its primary model from Edward Gibbon's *The Decline and Fall of the Roman Empire*, on the other hand, seems to be far enough removed from the present to succeed in more general and abstract speculations on the nature of human civilization. While neither writer develops his characters as individuals, there is a small but perceivable development in the kinds of characters Asimov employs in his series: at first they are Great Men of history, but as the events progressively come closer to the present of the far-future narrator, the characters become more human and more realistic through their self-doubt and frustration at their inability to influence the events. Still, as the Second Foundation emerges toward the end of the trilogy, the original notion – that only the ones who possess a superior understanding of historical forces can affect their course – is corroborated. All in all, Asimov's work, along with Heinlein's, exhibits a newly discovered consciousness of historicity in American science fiction, and several critics have suggested that the "sense of wonder" in Asimov's *Foundation* series lies precisely in depicting history and its grand sweeps (see, for example, Elkins 99).

As Csicsery-Ronay notes, what is interesting in the historical models that science fiction authors use "is not (or not only) how 'cognitively valid' or 'valuable' a given sf's adaptation of a historical model is, but what its lucid implications are" (84). He views science fiction's treatment of history as abstracted, so that "the cause-and-effect chain of human and natural events is emptied of the fatality of fact and experience" (84). In a sense, Golden Age

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science fiction pioneered this approach by presenting its thought experiments, even on history, as rather abstract, intellectual arguments.

Heinlein's at times parodic and self-conscious approach veers toward a commentary on the contemporary world which he extends into the future by repeating patterns of past events. Asimov, on the other hand, aims more solemnly into the future, and in doing so takes the nineteenth century Great Man approach as a self-evident part of the historical novels of the future which he sets to write. In his fiction, Asimov seems to employ a concept of history that is based on the Enlightenment ideal of progress, and the narratives of decaying civilizations à la Gibbon are blended with Comtean sociocultural development, the idea of history as progress, and social Darwinism. Still, at the same time, Asimov's series moves in the opposite direction by the need for fast-paced pulp narratives and Carlylean Great Man characters. This, in turn, implies a view of history highly dependent on individual heroes, even if the premise of the *Foundation* trilogy is that individual action will not affect the course of history.

Elkins points out that basing a narrative of future history on the past is problematic, because it at once seems to undermine the notion that the future could be significantly different from the past and forces the plot into a "predetermined template" (99). His Marxist point of view yields a reading where Asimov seems to waste the trilogy's potential for historical materialism and simplify the process of history by not engaging in a dialectic of historical difference. In Elkins's view, as Asimov creates a fictional world where history repeats itself, he is taking humans as "object of history rather than, dialectically, as a *subject and object* in the making of history" (106–107, emphasis original). Thus, in Elkins's reading, Asimov's characters are "nondescript pawns, unable to take their destiny into their own hands" (106) and the *Foundation* series also fails to adhere to Asimov's own notion of "social science fiction" of exploring the "impact of scientific advance upon human beings" (Asimov, "Social" 171).

However, Elkins oversimplifies Asimov's series by basing his reading on a single story, "The General," which, to be true, sets out to demonstrate the insignificance of individual action, in contrast to the *Foundation* stories before it. However, I would maintain that what Elkins sees as Asimov's "failure to grasp the complexities of historical materialism" (106) is really an attempt at utilitarianism. Asimov's series is mostly focalized through

the elite and the heroes whose utilitarianism seeks to provide the greatest good for the largest possible amount of people. The presumably oppressed masses are never really considered as such, and even the notions of free will and determinism are mostly left in the background – the ruling elite remain free to determine the history of their subjects. Rather, it seems to me that the benevolent dictatorship of this ruling elite reflects the spirit of the time and Campbell's meritocratic ideals. That is, Asimov's series projects a view of a world divided into the ones with power and the ones without, for the benefit of all. Thus, the original *Foundation* trilogy does not even consider revolting against the emerging Foundation hegemony, because the whole point of the manipulations is to focus on the process of establishing that hegemony in order to control humankind so as to save it.

A rather different issue, then, is the question of the historicism, or determinism with regard to human history, that seems to lie at the background of Asimov's psychohistory. As Angus Taylor has noted, the psychohistory in Asimov's series leans heavily toward reducing social processes into something that can be extrapolated from individual psychology, and he, too, points out that despite the claim that historical change can be predicted by crowd psychology, the series seems to rely on "machinations by few individuals" (62–63). Indeed, Asimov's characters seem to rely on what he argues in his essay on "Social Science Fiction": patterns can be distinguished in history, and thus also projected into future. Taylor's criticism rings true if we look at the relation of Asimov's notion to Marxism or criticism of historicism as such.⁵⁶ At the same time, Asimov's work reflects a Campbellian positivist attitude toward social sciences, or the willingness to present social development as governed by laws similar to that of physics – the fundamental optimism that the genius of humankind, when operating in a world governed by techno-meritocratic ideals, can produce solutions as they are needed, however complex the questions being asked. When we consider the larger *Robot-Foundation* series, up until the end of the original trilogy, history may have progressed in a cyclical manner, but

⁵⁶ However, it seems to me that Taylor is on somewhat shaky ground when he criticizes the notion that *Foundation* trilogy would be "an allegory on the limitations of historicism and determination" (qtd. in Taylor 60) on the basis that this is the phrase used when Asimov is introduced in a *Festschrift* for Karl Popper. As such, in my view Asimov's series leaves more room for agency as regards history – even if it is techno-meritocratic agency – than Taylor's determinist interpretation would allow.

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even if psychohistory requires reductionism to function, it also implies a strong desire to manipulate these cycles. This may be why Asimov's 1980s additions to the series seek to go beyond these cycles, even if it is by the imperfect solution of more extensive guardianship, as we shall see in chapter 5.

Although the leadership by Great Men in Asimov, just as in Heinlein, is supposedly a temporary state on the way toward a new stability, as the pattern of crisis management is repeated, it illustrates the view of history as a perpetual urgency where the ideals of democracy are indefinitely put on hold. As the frontier society of Asimov's Foundation is built and managed through crises, the characters seek justification for their actions in the greater good for all humanity. Heinlein's representation is more ambivalent and provides more of a cynical commentary on his contemporary world. But even in Asimov's *Foundation* series, the notion of enlightened engineers leads to contradictions at every turn. His grand narrative of humankind in the future results in tensions between several elements, implicitly questioning the all-encompassing vista which it seeks to afford. This is evident through dichotomies that exist between the concept of history that Asimov's works seem to imply, and the Enlightenment idea of progress. In the final analysis, Asimov's work points toward a tension between the Enlightenment freedom and the increasingly overpowering notion that society needs a mechanism to keep it on the right course – something that surpasses democracy, autocracy, or any of the generally accepted forms of governing.⁵⁷

The next chapter examines Asimov's series from the point of view of the frontier history it employs. As I have noted, Asimov repeatedly seems to juxtapose passive, encyclopedic approaches to (historical) knowledge with active, engineering approaches. As I see it, when he employs characters akin to the popularized version of American cowboy heroes – even more clearly men of action – Asimov's series projects the view that the dynamic of frontier expansion is the solution to the problems revealed by the awareness and understanding of history.

⁵⁷ This is something that Asimov begins exploring in *Foundation's Edge* and *Foundation and Earth* with the notion of a galaxy-wide collective consciousness, Galaxia (see chapter 5).

CHAPTER 4

FRONTIER AND EXPANSIONISM

I feel that without expansion of some sort, humanity cannot advance. It doesn't have to be geographical expansion, but that is the clearest way of inducing other kinds of expansion as well. (Elijah Baley in Asimov's *Robots and Empire* 71)

This chapter continues to build a better picture of Asimov's worlds by analyzing the theme of frontier expansion, the second major theme of the *Robot-Foundation* series. The previous chapter showed that the idea of understanding history and acting upon this knowledge is one of the cornerstones of the series. This was discussed in terms of the cultural historical context of Asimov's work, its connection with Enlightenment ideals, and the literary genres of science fiction and historical fiction. As suggested, Asimov creates a work saturated by history both on the level of themes and narrative structure, and in doing so, highlights the role of historical awareness and knowledge in the series. In order to examine the theme of the frontier, I focus on the way the consciousness of history is closely related to frontier expansion as a model for steering society.

In part, the discussion here revisits the original *Foundation* trilogy analyzed in the previous chapter, but from the point of view of the frontier theme and the idea of a necessity to expand in order to retain cultural vitality. Here I also turn to Asimov's 1950s robot novels *The Caves of Steel* (1954) and *The Naked Sun* (1957), and to his 1980s novels *Foundation's Edge* (1982), *Robots of Dawn* (1983), *Robots and Empire* (1985), and *Foundation and Earth* (1986), which continue and connect the robot novels and the *Foundation* series into one grand narrative of future history. As the 1980s novels retroactively link the two series, they turn Asimov's 20,000 years of future history into a chain of cycles of stagnation and revitalization of civilization through constant reinventions of the frontier. Thus, the attention here is on the connection of Asimov's series with the cultural historical context of American expansion and the ideology of Manifest Destiny. While the previous chapter studied how Asimov's work places science fiction in fruitful tension with historical fiction, here the focus is on how both of those genres coexist – and how the convention of the Western hero plays into Asimov's development of science fiction, thus emphasizing the historical connection with frontier expansionism.

4.1 SCIENCE FICTION AND THE FRONTIER

The prominence of frontier theme in the *Foundation* trilogy, like the appearance of historical models other than the Roman Empire, seems to have gone largely unnoticed in scholarship because of Asimov's explanations of using Gibbon's *History* as a model (e.g. *Memory* 311). Although something like the "harsh frontier existence of the Foundation" (DiTommaso 272) has occasionally been mentioned, what this notion actually entails has not really been explored.⁵⁸ Rather, his work has been studied from more abstract philosophical or ideological angles, giving rise to discussions about imperialism, determinism, and utilitarianism (Candelaria, Moore, and Miller, respectively). When suggested to him in interviews, Asimov himself was often quick to dismiss the possible American parallels in his work as uninteresting and simply due to his American cultural background and exposure to pulp fiction (Wojtovicj n.p., Ingersoll 73).⁵⁹ However, the consequences of that background are more important than is generally acknowledged, because of the ways in which they open up the expansionist themes in his works.

The present chapter, therefore, examines the themes of expansionism and the necessity of a frontier that run through much of Asimov's science fiction. Although at times overshadowed by the motif of the struggle between free will and determinism, I argue that the ideas of frontier expansionism are a crucial factor in understanding the body of Asimov's work. In fact, the *Foundation* series can be read as something bordering on an allegory of the history of American westward expansionism and Manifest Destiny. Moreover, the notion that humankind needs a frontier to prevent stagnation and to unify its efforts in expansion over space, links Asimov's series with Frederick Jackson Turner's "Frontier Thesis." Asimov repeatedly thematizes Turner's

⁵⁸ For example, Mogen in *Wilderness Visions* only hints at frontier themes in *Foundation*, and discusses them to some extent in Asimov's short story "The Martian Way" (1952) and his novel *Caves of Steel* (54), where they appear more explicitly. Similarly, Abbott notes how similar the view of frontier politics (i.e. manipulation by brilliant individuals) in *Foundation* is to many other Golden Age works (108); Watt comments on how the character of Hober Mallow "combines the attributes of a Viking chieftain and a Mississippi riverboat gambler" (139); and Elkins criticizes the way some of the language in Asimov's trilogy seems as if lifted from popular westerns (98).

⁵⁹ However, in an interview from 1980 Asimov speaks about expansion into space in a very similar way to his novels published only a couple of years later (Stone 69), as we shall see.

fear of the cessation of development at the end of the frontier, and transforms it into a solution where expansion becomes the cure to a stagnating culture.

I focus on the frontier theme in Asimov's works roughly in the order of their publication and thus in the order of his development of the theme, and show how the implicit Turnerian frontier notions in the original *Foundation* trilogy become increasingly explicit in the robot short stories and novels, receiving their most explicit expression in the 1980s novels. As my analysis of the frontier in Asimov's series is dependent on a reading of American history and Manifest Destiny by Anders Stephanson and others, I begin by briefly going through the main lines of development in American expansionism in light of their research. In essence, my reading takes the American history of expansionism as a phenomenon that had already become a mythical construct before making its way to the 1940s pulp science fiction. I then analyze Asimov's work as a reflection of this mythology, with reference to myth studies by Joseph Campbell and Leo Marx.⁶⁰

MANIFEST DESTINY AND THE "FRONTIER THESIS"

Manifest Destiny was a term for expansionist American ideology coined in the 1840s to justify the rapid expansion of Europeans over North America by divine right. Such destinarian elements in American political rhetoric have their origin in the early days of the Puritan immigrants, but the effects of this line of thought carried far beyond the mid-nineteenth century, as it transformed into ideas of civilizational imperialism, and further to the intellectual background of the Cold War United States and McCarthyism.

In the idea of Manifest Destiny, the concept of divine design was brought from the Age of Reason into the early nineteenth century American rhetoric, evidenced for example in Andrew Jackson's proclamation that "[p]rovidence has showered on this favored land its blessings without number and has chosen you as the guardians of freedom to preserve it for the benefit of the human race"

⁶⁰ Slotkin's vast study *Regeneration through Violence: The Mythology of the American Frontier* (1973), supports this approach, as he notes: "the evolution of the American myth was a synthetic process of reconciling the romantic-conventional myths of Europe to American experience" (179). Moreover, for example also Mogen interprets "the Myth of America . . . as a variant of the universal monomyth Joseph Campbell describes" ("Frontier" 26).

(qtd. in Fresonke 5). Although this conceptualization of a national destiny allowed for more secular development than the earlier Puritan rhetoric and was primarily based on current political agendas of expansionism, at the same time it shows the influence of both Puritan theology and Enlightenment ideas in its notion of fulfilling a historic mission that would eventually benefit the whole world. And while the original Manifest Destiny fashioned expansionism into the action of converting a wilderness with rich resources that was earlier “unused or misused” into “a smiling society of homes” (see Merk 46–47), the later forms of the rhetoric turned to wider implications of expansion.

When the western side of the North American continent was finally reached, the wilderness to be conquered by straightforward territorial expansion seemed to end. In his famous 1893 essay, “The Significance of the Frontier in American History,” Frederick Jackson Turner gave a consistent form to the idea that the development of the nation had been enabled by the movement through the purifying wilderness of the Western frontier:

The existence of an area of free land, its continuous recession, and the advance of American settlement westward, explain American development. (Turner 31)

The wilderness masters the colonist. . . . It strips off the garments of civilization and arrays him in the hunting shirt and moccasin . . . here is a new product that is American. (33–34)

The core idea of what became known as Turner’s “Frontier Thesis” was that the American national character had been shaped by the frontier experience which forced the settlers to assume a new vitality. The frontier was at this time already present on several levels of American popular imagination and mythology, and Turner’s hypothesis drew heavily on the idea of the frontier as a “safety valve” that provided free land and thus released social pressures.⁶¹ Turner’s thesis also gave the notion of regeneration on the frontier academic plausibility by proposing a hypothesis for how the Americans were made exceptional by their unique conditions and development through the frontier

⁶¹ In fact, this idea had been present in the American political rhetoric at least since the 1850s popular slogan to “Go West, young man, go west and grow up with the country” often attributed to Horace Greeley, even if the origin of the phrase is disputed (Fuller 231–242; see also H. N. Smith 201–207 on the safety valve rhetoric).

existence of the early days of the nation (Sharp 59). And as Slotkin extensively argues, the American myth became one of initiation and regeneration on the frontier, through violence (21–22). At the same time, Turner's essay also lamented reaching the end of this frontier, thus contributing to a general fear, a "frontier anxiety" (Wrobel 113), which entailed that because the expansion seemed to have ended, also development would cease. Turner's essay was instrumental in the way it represented the late nineteenth century atmosphere of nostalgia for an era when expansion still seemed limitless, and the idealized, heroic settlers were kept pure by their hard work. Ever since this essay, the tendency to glorify the rapid early nineteenth century westward expansion has contributed to the idealization of forward movement in the American society.

As Stephanson notes, a certain admiration for the age of the Roman Empire had always been present in American rhetoric, and when the frontier closed, the imperialistic undercurrent strengthened. With the knowledge of the fate of the Roman Empire – even Gibbon in his *History* attributed Rome's decline partly to the unmanageable size of the empire – this raised also concern. However, by the beginning of the twentieth century, direct overseas expansion was mostly considered utopian, and expansion was sought within the world of commerce as new opportunities opened up in Asia, soon leading to visions of global economic domination by the United States (Stephanson 58, 62–63). At the same time, the American mission was also recast as what Stephanson calls a "civilizational imperialism under Anglo-Saxon impress" (67), which began to fashion the United States as the moral example for the world. In a way, this reconceptualization could be seen as an answer to Turner's Frontier Thesis – after all, one of its possible interpretations was that there was a need "to expand to stay healthy" (Stephanson 18).

Manifest Destiny was a product of a long development of religious and nationalist rhetoric. It began in the Puritan ideas of Exodus and exceptionality, transformed itself into secular territorial expansionism, and gave birth to an ideology that justified expansionism. After the stage of territorial expansionism, the rhetoric was influential in building a commercial empire, while introducing the idea of the duty to civilize other countries. This led to civilizational imperialism, and Manifest Destiny in turn changed to what Stephanson calls "managed destiny" (110), where the United States was conceived to have an active role in making others follow its example. These

different stages of the rhetoric were used to justify attempts to control other nations, but the flexibility of the concept also helped to create and maintain a sense of righteousness. In this way, British imperialism could be considered a deplorable oppression of weaker people, whereas American imperialism was noble and civilizing, even if both were advanced by the same methods and promulgated with similar justifying rhetoric. Asimov's *Foundation* trilogy, I suggest, progresses through similar stages, although the time scale is different.

THE FRONTIER THEME IN EARLY AMERICAN LITERATURE, ESPECIALLY SCIENCE FICTION

Asimov's *Foundation* trilogy was far from the only work of science fiction that alluded to the history of American expansion. The heyday of the pulp magazines from 1920s to 1950s was a time when American popular culture was pervaded by images of westward expansion and its heroes. In science fiction, space opera borrowed the Western's storylines and enlarged them on a galactic scale. Transplanting the familiar popular imagery of the Western into the future kept the narrative recognizable, while opening new settings for the action (see Westfahl, "Space" 199).

The connection between science fiction and frontier elements began with the nineteenth-century boy inventor and backyard scientist having frontier adventures (Wolfe, *Evaporating* 124), such as the dime novel *The Huge Hunter: or, The Steam Man of The Prairies* (1868) by Edward S. Ellis. The frontier conceptualization properly entered space most famously in Edgar Rice Burroughs's *Mars* series (starting in 1912), but it was not until E. E. "Doc" Smith's *The Skylark of Space* (1928) that the subgenre became popular (see Westfahl, "Space" 198). Brian Aldiss' much quoted comment on *Skylark* as putting "the Injuns among the stars" (225) aptly describes much of early space opera.

By the 1940s, the space frontier was already such an established convention that frontier elements were frequently used in formula science fiction. Whereas space opera may have replaced the dime novel cowboy's revolver with a ray gun, taken him from the Arizona desert to Mars (no major change there), and replaced his Native American adversaries with aliens, Golden Age science fiction entailed a better understanding of the metaphorical potential of the frontier theme. In practice, this often meant focusing on the

expansion, harsh environment, and the difficulties of establishing a new civilization in the frontier of space. But even such metaphorical structures were still based on the popular understanding of frontier – as represented by the dime novels and pulp fiction – and often displayed overly romantic notions of power politics steered by exceptional individuals.⁶²

One of the recurring themes was an extrapolation of the idea which Turner popularized in his Frontier Thesis. If the frontier indeed was what provided American society its vigorousness, the solution to many problems of the modern United States (or the world) could be found by opening new frontiers in space. It could be said that space opera sought to remedy the end of actual terrestrial frontier by re-enacting its discourse and themes in the fictional setting of an endless frontier in space, which gave the myth of individual and societal regeneration a new life as a metaphorical construction (see Pfitzer 51). Hence, this produced science fiction where the beneficial effects of the American expansion were transferred to future space frontiers, so that they became solutions to problems like “overpopulation, depletion of natural resources, cultural stagnation, and the loss of freedom and opportunity for the individual” (Mogen, *Wilderness* 53).

The idea of an escape into wilderness and re-emergence with newfound strength is a frequent feature in American literature also more generally. In *The Machine in the Garden*, Leo Marx argues that the “three stages of symbolic action” are fairly common in what he calls the “archetypal American story,” because the Exodus theme is inherent in American intellectual history. These stages are (1) the “corrupt city” to be escaped from, (2) “raw wilderness” which causes self-reflection, purification, and improvement through action because the wilderness needs to be tamed in moving (3) “back towards [a better] city” (Marx 71). These three stages bear similarities with Joseph Campbell’s theory

⁶² See Abbott (51, 107–110) and Berger (20) for a discussion on the prominence of individualistic manipulator heroes in Golden Age space frontier politics. Even though 1950s and 1960s saw some ironic treatments of the science fiction frontier (for example in Fredrik Pohl and Cyril M. Kornbluth’s 1953 *The Space Merchants* and Philip K. Dick’s 1965 *The Three Stigmata of Palmer Eldritch*), a more historically accurate handling of the political and colonial implications of the frontier theme did not really enter science fiction until the 1970s in works like Ursula K. Le Guin’s *The Word for World is Forest* (1972). Indeed, despite later works like Greg Bear’s far more realistic detail of colonial/expansionist politics in *Moving Mars* (1993), it is doubtful whether a more critical approach has ever replaced the mythical frontier as represented in popular entertainment.

of the monomyth, and Marx acknowledges that the American myth of a new beginning may be a variant of the primal myth. This American version of the myth includes a strong hope that what has been learned in the American West can now be applied to the world. Since the whole “American exodus,” with its individualistic focus, is only a few hundred years in the history, it is still fairly concretely present in the culture, explaining some of the specifically American fascination with strong hero figures. Also, conceptualizing the frontier as the young nation’s safety valve is related to regarding the American history of expansionism as a heroic quest: the hero retreats to wilderness to bring back the boon of new technology, innovation, and societal vitality to build a better world.

The cowboy is in many ways the quintessential American hero of this kind. I use the term *cowboy hero* to point out the similarities of Asimov’s characters with this cultural archetype, and its representations in pulp Westerns. As noted in chapter 2, when the cowboy became a heroic archetype of the American frontier and a symbol of the values and myths associated with it, his figure was far removed from the actual, historically accurate cattle herders. The key aspects of the cowboy archetype for my consideration are the ways he stands for a heroic pioneer, an individualist, whose exceptionality stems from skills learned in harsh frontier conditions, but who is at the same time able to use those skills (often the same as those of the villains he opposes) to defend society (see Savage 22–24; Cawelti, *Six-Gun* 29, 57–62). As we have seen, in Asimov, those frontier conditions are largely metaphorical. In my view, then, Asimov’s characters often have a similar frontier attitude and become like latter-day cowboy heroes by their self-certain guardianship.

Turner’s Frontier Thesis was in a sense an aftermath of the rhetoric of American exceptionality and Manifest Destiny, fortifying the quintessential American myth of forging the national identity through growth driven by the process of conquering frontier. In science fiction, the space frontier expansionism often functioned like a logical consequence of Turnerism where, on at least a metaphorical level, science fiction sought new avenues of further expansion in space to replace the ending terrestrial frontier. Since the 1950s – following the shift in the historiography of the American frontier from an exceptionalist and Turnerian interpretation to an understanding of the American frontier history as a typical case of expansionism and colonialism

– the frontier theme in science fiction shifted to a more critical approach in more recent works such as Kim Stanley Robinson’s 1990s Mars trilogy (Rieder, “American” 168–169). However, Asimov always seems to retain the less questioning and more Turnerian approach to the frontier theme.

In the *Robot-Foundation* series, the quest for a new beginning through the Foundation seems to become the ultimate virtue because it is presented as the only way that can salvage the human civilization. At times unwittingly, Asimov’s characters perform the heroic quest to bring back the boon of progress, or at least create new ways to manipulate the situation to the advantage of their expanding society. In the following, I trace the development of the frontier theme and especially the Turnerian idea of a necessity of expansion in Asimov’s works. As a starting point, I revisit the *Foundation* trilogy for a detailed analysis of its frontier theme, because it offers the most consistent reflections of these ideas. After this, the discussion turns to the robot novels and Asimov’s later additions to the series that develop the theme further and make it more explicit.

4.2 ASIMOV’S FOUNDATION SERIES AND MANIFEST DESTINY: FROM THE FALL OF ROME TO THE RISE OF COWBOY HEROES

As the stories that form the original *Foundation* trilogy were initially based on Asimov’s reading of Gibbon’s *History*, the trilogy started as a dramatization of the grand narrative of future human society going through an enormous cycle of decline and rebirth. Because Asimov explicitly based the notion of a declining empire on Gibbon, the trilogy is often read merely as re-enacting the fall of the Roman Empire on a galactic scale. However, I would argue that as the trilogy plots out the initial steps of the Foundation on its course toward establishing the Second Galactic Empire and the need for methods to replace the falling order arises, the notions of American westward expansion and Manifest Destiny overrule Gibbon’s *History*, turning the trilogy into a story of American expansion toward the frontier of space.

The development of the Foundation rhetoric and action, and the parallels to American ideological and political history reveal the frontier and the notion of Manifest Destiny as one of the governing themes in the trilogy.

On the one hand, the trilogy portrays large sweeps of future history, where the decline and regeneration of civilization is portrayed through hero characters that are archetypal Great Men, as noted in the previous chapter. On the other hand, their characterization draws heavily on the pulp genre conventions of the Western hero. Because of this, the characters are a useful entry point to the frontier theme and its larger ideological background.

PURITANISM AND MANIFEST DESTINY

The Foundation's rather American sense of chosenness and exceptionality is established directly by Hari Seldon in his first recorded "appearance" at the Time Vault. Seldon reveals that the *Encyclopedia* project is a fraud, set up to extract Imperial charter for the project and to attract enough people to establish the Foundation and keep them preoccupied where they "have now no choice but to proceed on the infinitely more important project . . . our real plan" (F79). This is like a divine revelation of destiny, where the people of the Foundation become the Chosen Ones,⁶³ Seldon's own Chosen People, whose future he has inescapably defined and on whom he now pushes a similar notion of Exodus: chosenness, migration, and redemption. Seldon projects a vision of the Second Galactic Empire as a promised land toward which the Foundation is inevitably headed. In addition to the Old Testament reference, in the context of allegorical connections to American history, this invites parallels to the way the New England Puritans liked to see themselves as being on an exodus (comparable to the Jewish exodus) toward a better world that Providence had revealed in the form of the newly discovered continent. In *Foundation*, too, the place of exile is as if providentially selected (by Seldon and his psychohistory), but the scope of Seldon's promise is infinitely larger as the "new and greater Empire" encompasses the whole galaxy. In this procession, the planet of Terminus, where the Foundation is exiled, only forms a temporary phase between the escape from the corrupt past and the emergence into a magnificent future. In American history, on the other hand, many Puritans saw the beginning of the Reformation as a sign that the fulfilment of the apocalyptic prophecies in the Book of Revelation was at hand, and some viewed it as the final Battle

⁶³ Although Asimov was an atheist, his Jewish-emigrant upbringing made him well aware of the stories Old Testament, which Seldon's proclamation also evokes.

of Armageddon itself (Stephanson 9–10). Hari Seldon’s “prophecies” thus entail predictions of a civilization falling apart owing to its corruption, but his predictions are backed up by the science of psychohistory, and include the plan of restoration.

While exodus is one of the ways in which both America and the Foundation allegorize themselves, Seldon’s message draws explicitly also on the rhetoric of Manifest Destiny. Seldon is like a Puritan theologian laying the foundation for the ideology that is later to become Manifest Destiny, but he is also like the 1840s political activist John O’Sullivan who gave Manifest Destiny its famous definition. The section in *Foundation* – which, as argued in chapter 3, creates a sense of urgency for the Foundationers – also creates their sense of inevitable destiny:

From now on, and into the centuries, the path you must take is inevitable. . . . your freedom of action will become similarly circumscribed so that you will be forced along one, and only one, path. (*F* 80)

The message of an inevitable future is hammered home with pseudo-Calvinist predestination. During his appearance, Seldon also repeats several times what is to become the main ideological point of the message: that the people of the Foundation are “the seeds of Renaissance and the future founders of the Second Galactic Empire” (*F* 80–81). Just as O’Sullivan’s 1845 proclamation of “the right of our manifest destiny to overspread and possess the whole continent” (*Morning Star* December 27, 1845, qtd. in Stephanson 42), Seldon, too, gives the Foundationers the license to fulfil the destiny of building a “new and greater Empire” by “whatever devious course your history may take” (*F* 81). While O’Sullivan envisioned Manifest Destiny as the American people’s destiny to possess the land “which providence has given us for the development of the great experiment of liberty and federated self government” (qtd. in Stephanson 42), for the Foundation Hari Seldon himself becomes that “providence.” Rather than a “great experiment of liberty,” the Foundation’s aim for a “Renaissance” of a Second Galactic Empire is even more urgent: it is the only way to reach liberty and independence, for otherwise the galaxy will plunge into “thirty thousand years” of barbarism (*F* 80). Ultimately, Seldon’s speech looks like the credo of Manifest Destiny, where the development of the idea occurs simultaneously with its fully developed form and later notions of

civilizational imperialism: this Foundation exodus is simultaneous with ideas of not only the right but also the urgent duty to expand and to redeem the rest of the galaxy.⁶⁴ Shortening the impending period of “barbarism” then becomes both a missionary calling and a redemption of a scientific world through the preservation of knowledge and re-establishment of civilization.

To add to the frontier parallel, Seldon manipulates the Foundation toward its Manifest Destiny because:

We cannot stop the Fall. We do not wish to; for Empire culture has lost whatever virility and worth it once had. But we can shorten the period of Barbarism that must follow – down to a single thousand years. (*F* 80)

This Gibbonian interpretation of the situation turns into a Turnerian solution in Seldon’s speech, where the fall of the Old Empire is in fact a necessity that facilitates the rejuvenation, because it will recreate the frontier conditions and provide a need to build something new to replace the corrupt old order. This conceptualization creates also a similar distinction between the Foundation and the surrounding “barbarians” as between the Puritans and the unbelievers outside their settlements. At the same time, Seldon’s declaration also represents the opening of Puritan rhetoric to ideas of Enlightenment where rational action and having God on your side went hand in hand, just as abiding by Seldon’s declaration ensures the Foundation success. As the high priest of this rationality, Seldon steers the Foundation into exile and expansion by deliberately engineering history to produce a Turnerian effect, a notion which Asimov also repeats in his other works. Because there is effectively no uninhabited frontier left in the galaxy of Asimov’s fictional world, it is a process of re-civilization of the formerly civilized who have

⁶⁴ The term *Manifest Destiny* is actually mentioned twice in the trilogy, but undermined by the way it is presented as a term for naive determinism. In *Foundation*, a deputation of young politicians criticizes the reliance on Seldon’s promise, saying “we are forming a new political party; one that will stand for the immediate needs of Terminus and not for a mystic ‘manifest destiny’ of future Empire” (*F* 88). The term is in quotation marks to emphasize that the speaker is using it ironically, not as an analysis of the situation. Similarly, the character of Bel Riose mocks the Foundationers’ strong belief in their predetermined future in *Foundation and Empire* by noting “the ideas of the common folk; their ‘manifest destiny’, their calm acceptance of a great future” (*FE* 28).

degenerated into “barbarism,”⁶⁵ unlike the American Manifest Destiny which mostly concentrated on pushing the alleged savages aside. Still, in both cases the rhetoric eventually turns from frontier survival to acting as guardians for the whole world. Thus the declining and now barbarian kingdoms of the Old Empire become the equivalent of a frontier where to expand after the fall.

In the *Foundation* trilogy, the whole of human civilization becomes a kind of mythical hero going through an escape – initiation – return development. The trilogy progresses through phases corresponding to Leo Marx’s three stages of symbolic action in archetypal American fables, starting with a situation reminiscent of the “American Exodus” and progressing through stages which resemble the American frontier expansion. The establishment of a new empire in *Foundation* is thus achieved by going to the frontier and emerging from there with new resources that enable successful religious, commercial, and political dominance. In this process, Seldon gives way to another character, Salvor Hardin.

ENLIGHTENMENT AND FRONTIER POLITICS

Hari Seldon may put the frontier situation into motion, but it is Salvor Hardin,⁶⁶ the first mayor of Terminus, who represents the survival and revitalization of humankind on that frontier. His role is similar to the popular image of the United States’ Founding Fathers as he begins to establish the legislative existence of a new nation in the wilderness. Hardin is also the first of the typical Golden Age heroes in *Foundation* since, as a Great Man of the Foundation history, he is the superior individual who knows what is right for the masses

⁶⁵ Although the Foundation’s frontier existence is mostly metaphorical, and their actual location never becomes a central concern, living in harsh frontier conditions “with brute economy” forces them to “develop new techniques and new methods” and gives them an edge against the “colossal resources” of the Old Empire (*F* 230). As the Foundation emerges from the metaphorical frontier, this technological superiority and virile initiative, born out of the necessity of limited resources, helps it surpass the surrounding “barbarians” and the remains of the Old Empire.

⁶⁶ Even though Asimov himself seems to have been more concerned with using character names that would not resemble real ones and would offer enough variation, instead of making them essential parts of his composition (*Gold* 327–332), some of them carry obvious connotations that emphasize their role in the story. The *hard salvage* process that the character of Salvor Hardin begins is one of them.

and thus takes the power into his own hands. In this way, he becomes the embodiment of rather cynical pragmatism, illustrating how the herd-like masses can be steered by intelligent individuals.⁶⁷ In terms of the Gibbon model, Hardin stands for the beginning of the Enlightenment in the “dark ages” (*F* 34) Seldon has foreseen, but he is at the same time also a romanticized frontier politician. Asimov’s characters exist in a constant tension with these ideals, as they achieve their enlightened goals through the “devious course” (*F* 81) of cynical manipulation. In Seldon’s speech, the Foundation’s sense of exceptionality is present in the form of the Puritan rhetoric of predestination and chosenness, blended with secular ideas of Manifest Destiny. But now, as Hardin takes an active role through his supremely rational action and courage to rely on himself, the national symbolism changes to a more explicit sense of exceptionality, which is born on the frontier out of the necessity of the (political) conditions. Intellectually, he resembles a popular version of Turner’s notion of how the settler develops on the frontier through creative adaptation.

Hardin’s exceptional rationality becomes evident as he notices the significance of the way the surrounding provinces of the old Empire are losing the knowledge of nuclear science. This is a galaxy-wide civilization that is stagnating and losing its ability to operate and apply scientific knowledge, creating a situation where, for example, “to be a good archaeologist was to read all the books on the subject” (*F* 75). Hardin, on the other hand, relies on himself, not on the “authority of the past,” and his behavior is marked by the practical understanding that “what is needed is a little sprinkling of common sense” (*F* 74). All of this makes him a prime example of the vitality of the frontiersman (outside the Old Empire), contrasted with the slackness of the city-dweller (inside the Old Empire). Even the Foundation Encyclopedists represent the crumbling Empire, as Hardin stands for the first generation of people who are born on Terminus, and are thus free from the old world.⁶⁸

⁶⁷ Hardin is also a rather typical technocrat of the sort that Asimov, Heinlein, and many of the other science fiction held up as the ideal rulers.

⁶⁸ Mogen detects a similar motif of the frontier resulting in freedom of the individual only if the individual is born there in Asimov’s short story “The Martian Way” (1952) where Martian settlers contrast their situation with Earth (*Wilderness* 53): “They’re slaves to their planet. Even if they come to Mars, it will only be their children that are free” (*RD* 239). DiTommaso, too, notes that Foundation heroes are distinguished from the declining galaxy by their “frontier self-sufficiency” and common sense (283).

Hardin's behavior draws on the idolized masculine heroes of the frontier, as he is at his best under pressure, his eyes "cold and hard" (F 76), like a cowboy hero who calmly evaluates the situation before making his move. The attitude and the courage to take risks in Asimov's heroes is similar to those of the Westerns, space Westerns, and space operas. However, while such rather action-based stories feature characters with incredible physical abilities, who succeed against all odds by means of their hard fists and six shooters or ray guns, Asimov's heroes excel by their rational minds, so that in their intellectual battles, they arrive at correct conclusions with very little background information. Hardin's vigorous effort to take initiative and try to "outguess the greatest mind of the age" (F 77) is also apparent in his inner monologues where he constantly tries to work out problems with a strong sense of invention.⁶⁹ The focused sense of urgency is evident as Hardin is depicted "chew[ing] at the end of his cigar. It had gone out but he was past noticing that. He hadn't slept the night before and he had a good idea that he wouldn't sleep this coming night" (F 76). Although Hardin's character is rather toned down compared to the swashbuckling space opera heroes of the likes of Doc Smith's *Skylark of Space* (1928), he is still the hero-figure who saves the day by challenging – by the force of his intellect alone – what seems to be an overwhelming enemy. Thus, in addition to being the lone frontier hero, Hardin becomes the main symbol for Enlightenment ideals, as he solves the crises peacefully by his supreme rationality.

But Hardin's frontier politics also show his appetite for an empire; after all, he strives to fulfill the Seldon Plan of turning the Foundation into the next Galactic Empire. The Foundation's situation is simultaneously that of frontier survival and (intellectual) colonialism. This sense of Foundation supremacy and exceptionality that runs through the trilogy is not unlike the attitudes of American "civilizational imperialism" voiced during the American occupation

⁶⁹ In addition to long passages of direct speech, Asimov uses psychonarration and narrated monologue – as per Dorrit Cohn's terminology (105) – to depict his characters' inner workings, as when Hardin mulls over the situation and seems to come to a realization:

He was trying desperately to remember the psychological theory he had once learned – and from it he got one thing right at the start.

A great psychologist such as Seldon could unravel human emotions and human reactions sufficiently to be able to predict broadly the historical sweep of the future.

And that meant – hm-m-m! (F 62)

of the Philippines in 1900. As Stephanson notes, in American rhetoric, “duty” became a driving concept of the destinarian framework in this new colonialism (87). The reformulation of the Manifest Destiny mission included declarations like: “What America wants is not territorial expansion, but expansion of civilization. We want, not to acquire the Philippines for ourselves, but to give the Philippines free schools, a free church, open courts, no caste, equal rights to all” (Lyman Abbott, qtd. in Stephanson 88). In practice, this meant that the United States considered itself to be driven by the duty to rescue people from their barbarism, and this urgency justified even conquest. The rhetoric concerning the Philippines also included a paternalistic tone:

Rebellion against the authority of the flag must be crushed without delay, for hesitation encourages revolt; and without anger, for the turbulent children know not what they do. (Senator Albert J. Beveridge, qtd. in Stephanson 99)

In *Foundation*, the attitude that “turbulent children know not what they do” is shown in Hardin’s power elite who act as Foundation agents in order to supervise the mass manipulation. This becomes evident as Hardin and one of the agents – or “high priests” – discuss the situation on Anacreon, which they have brought under Foundation control through a fabricated religion based on Foundation’s advanced technology: “It is remarkable,” notes the priest, “how the religion of science has grabbed hold. I’ve written an essay on the subject – entirely for my own amusement; it wouldn’t do to have it published” (*F* 96). Although the masterful heroes of the Foundation are aware of the seriousness of the situation, at the same time it seems to them little more than a scientific experiment in empirical mass psychology. Hardin himself also enjoys the intellectual challenge of the dealings he engages in, as in the case of the Foundation Board of Trustees who in his view do not take active enough a stance (*F* 59). Asimov’s cowboy heroes of intellect get their excitement from constructing arguments which make them seem like Wild West gamblers, who use ideas instead of cards or guns.

At this point, the Foundation’s ruling elite is represented as uncorrupted by power: the urgency of the frontier drive and the need to maintain Foundation independence surpass self-interest, because Hardin and his accomplices are on a mission legitimized by Seldon’s psychohistory. Although they may enjoy the intellectual challenge, for instance the Foundation agent/high priest

on Anacreon still considers his position “an uncomfortable job” (*F* 95) and Hardin, when visiting Anacreon, has “no stomach for the religious tasks” (*F* 120). Asimov’s characters seem to view it as shouldering the “White Man’s Burden,” to borrow Kipling’s famous phrase, popularly often understood as glorifying British colonialism as guidance to savages. Still, by representing Hardin’s party as almost embarrassed by the necessary hoax they have created, Asimov sets them above any self-righteous colonizers, underlining that Hardin as a leader is morally worthy of the power he exercises. Even if Hardin is practically the sole ruler of Terminus and maintains a religious hold on the kingdoms surrounding it, he is not exploiting power for his personal needs. When criticized by young politicians who want a more active foreign policy and a more open government than the “lick-spittle clique” (*F* 88) by which he rules, Hardin chooses not to silence the opposition, contrary to his lackey’s suggestion. However, Hardin also owns the local newspaper, and can thus influence the press as his agenda requires (*F* 57). All in all, despite his manipulations, Hardin remains the voice of reason and is represented as an ultimately trustworthy autocrat, who balances between democracy and totalitarianism and in the end does what is for the good of the people of the galaxy as a whole.

This is clearly a Campbellian approach. Even if Asimov did not share Campbell’s libertarian and even racist views (*Memory* 261, 276), his influence led Asimov to occasionally adopt authoritarian attitudes in his fiction. The matter-of-fact manipulation and plotting by the elite in the *Foundation* trilogy appears with an implication that it is acceptable because it is done by the right people, with the right ulterior motives.⁷⁰ As Berger notes, despite Asimov’s considerably more liberal standpoint, he nevertheless “arrives at a conclusion strikingly similar to Campbell’s most enduring political aphorism: the only difference between heaven and hell is the nature of the rulers” (20). Although autocracy is hardly what early American statesmen considered good government, it draws on the equally American cowboy hero motif so

⁷⁰ While some of the authoritarianism in Golden Age science fiction coincided with the home-front attitudes during the Second World War, Campbell himself remained rather antidemocratic in his utilitarian libertarianism even after the war: “I’m not loyal to democracy, because, as I see it, responsible government is the larger cause; democracy is a good thing only insofar as it serves that cause” (Letter to E. E. Smith, May 26, 1959, *Campbell Letters Vol I* 376).

common to the genre pulps of the early twentieth century. One of the major characteristics of the cowboy hero is that while he possesses the same skills as the villains, he uses them to defend the “good guys” (Cawelti 24, 29). In works of popular culture, this trait was often extended to characters other than cowboys, leading to a tendency to excuse and even glorify the cunning and shrewd entrepreneurs or politicians whose heart is in the right place, even though they use the same means as their adversaries. Such American heroes become the driving force in the next phase of the Foundation expansion, where democratic processes are overtaken by lone heroes who know what is right and do not let the letter of law keep them from achieving it.

CAPITALISM AND THE MANAGEMENT OF DESTINY

After Hardin’s first steps in frontier survival, the Foundation’s presence on the frontier turns into active conquering through religion and commerce. The Foundation traders begin as instruments of religious control, not unlike the late nineteenth century American views of combined commerce and religion as the supreme civilizer (see Stephanson 98–100). However, just as Manifest Destiny was transformed into what Stephanson calls “managed destiny” (110), the Foundation traders are instruments of making the rest of the galaxy follow the example set by the Foundation.

As the Foundation traders become agents of this change, at the same time they are also individual heroes who continue the frontier theme. However, rather than the enlightened frontier politician represented by Hardin, they resemble romanticized versions of cowboys, prospectors, fur trade merchants, or the self-made men of their trade empires, and as such, also they underline the connection of Asimov’s series with the mythology of the American West. As noted in chapter 3, also the *Encyclopedia Galactica* quotation that opens the story “The Traders,” which describes these “massive, lonely figures” and their exaggerated stories (*F* 141), points to the tradition of Western fiction, and sets the stage for characters similar to the legends of the American West.

Limmar Ponyets, the trader protagonist in “The Traders,” is piloting a kind of wagon train or a fur trade route to the stars, travelling “tremendous distances of the Periphery” with “ships often nothing more than patch-quilts of home-made repairs and improvisations,” in the words of *Encyclopedia*

Galactica (F 141). These traders also dream of becoming self-made millionaires at the same time as they advance the Foundation cause of subduing the frontier of the “Galactic Periphery” (F 141), not unlike a treacherous Indian territory in a Western story. Asimov further emphasizes the frontier connection by having Ponyets contemplate his sales pitch in terms of similes like “limp[ing] like a shot-up space wagon,” and underline his frontier self-reliance with the maxim: a “trader has to know a little of everything” (F 152, 148). Instead of trusting people, Ponyets relies on their “intelligent self-interest” (F 159) and his ability to exploit it, thus putting into action both his cowboy hero ethics and the motto that the traders “half-mockingly” adopt from Hardin: “Never let your sense of morals prevent you from doing what is right!” (F 141). In the end, of course, just like the cowboy heroes, also Ponyets will do the right thing, albeit in his own fashion.

As such, “The Traders” serves to demonstrate how expansion can rely on that intelligent self-interest, the craving for financial gain by the traders and their customers alike. Ponyets becomes a symbol of the brutal capitalism characteristic of the Wild West speculators, as he essentially uses the greed of the barbarians to trap them into a subservient customer relationship. In fact, Ponyets himself seems rather obsessed with his sales quota, the main source of his emotional reactions:

‘Damnedest mess! I’m way behind quota.’ (F 142)

‘With my quota dead on its feet, it’s murder to go there.’ (F 143)

‘How’s your quota this year?’ (F 143)

‘I’m here with a full cargo stinking into uselessness, and a quota that won’t be met... I’ve *never* ended up below quota yet.’ (F 150)

‘... and that doesn’t count toward the quota.’ (F 159–160)

Even if Asimov’s vision of a cunning frontier salesman is a stark simplification, it effectively projects the optimistic version of the myth of the American dream. Ponyets embodies some of the qualities of the stereotypical reluctant hero and agrees to advance the Foundation cause, if it is advantageous to him: “I’m out to make money . . . If it helps the Foundation at the same time, all the better” (F 150). This is, of course, also the climax of the American dream of building a nation by making a profit, and, in the end, Ponyets turns out to be almost as jolly a swashbuckling salesman as Heinlein’s Harriman in his manipulations,

as when he recounts to the Foundation agent how he tricked his opponent into subservience (*F* 161). Thus, the period of trading expeditions in *Foundation* echoes the image of the Wild West where the prosperity and survival of archetypal heroes was directly dependent on their ingenuity and cunning, and where all actions are justified by their greater mission.

In his discussion of how Heinlein glorifies the “profit motive” in the Future History stories, David Mogen points out that the frontier endeavor often receives its ultimate justification when it is profitable and thus results in practical benefits for humankind (37). Asimov’s traders share this profit-oriented attitude, but their supposed selfishness is backgrounded and the mission of nation-building and management takes over as the primary motive for their actions. The strongest manifestation of frontier commercial survival is found in the trader character Hober Mallow.

As noted in chapter 3, Mallow becomes a symbol of the socioeconomic forces that guide the Foundation toward its future, even under the leadership of self-interested men. But Mallow also demonstrates some of the clearest cowboy hero characteristics and connections with the American quest of westward expansion in the trilogy. In a scene reminiscent of the Western, he enters the house of an old patrician like a lone gunman coming to a frontier town.⁷¹ The patrician whom Mallow meets exclaims: “*you* a trader? You look more like a fighting man. You hold your hand near your gun and there is a scar on your jawbone” (*F* 196). Mallow’s own description of his trading territory could just as well fit a Western: “There isn’t much law out there where I come from. Fighting and scars are part of a trader’s overhead” (*F* 196). At the same time, he embodies ideas of frontier capitalism:

But fighting is only useful when there’s money at the end, and if I can get it without, so much the sweeter. Now will I find enough money here to make it worth the fighting? (*F* 196)

Highlighting the thematic connection with American history of expansionism, Mallow views the Republic of Korell, formerly part of the Old Empire as “virgin territory” (*F* 174). Echoing the good hunting of the yet-to-be-settled frontier territories of early nineteenth-century America, Mallow notes that they will

⁷¹ On the relationships of characters in a Western see, Cawelti (29).

find “[g]ood trading here,” and his men explicitly even refer to the Korellians as “savages” (*F* 174, 179). On the frontier, Mallow retains his calm in the face of confusing situations, as when on Korell a missionary seeking refuge from the locals is let into his ship, but also maintains his harsh discipline demanded by the urgency of the situation. In the end, he throws the missionary out on the mercy of the Korellian mob gathered around his ship.

In the mythology of the American frontier, the cowboy represents the “cult of masculine” that “developed from the he-man mentality of some late-nineteenth-century exponents of militarism, imperialism, and the survival of the fittest” (Savage 96).⁷² Famously, Theodore Roosevelt was one of the advocates of the frontier hero as a model for military action. In his 1888 book he says:

A cowboy will not submit tamely to an insult, and is ever ready to avenge his own wrongs; nor has he an overwrought fear of shedding blood. He possesses, in fact, few of the emasculated, milk-and-water moralities admired by the pseudo-philanthropists: but he does possess, to a very high degree, the stern, manly qualities that are invaluable to a nation. (Roosevelt, “Ranch Life and the Hunting-Trail” 55-56, qtd. in Savage 96)

Roosevelt shaped the cowboy-figure into the ultimate “man’s man” in a campaign to revitalize the men of the nation so as to counter what he saw as the curse of responsibilities and benefits of civilization which led to a more effete existence. Around this time, movements like “Muscular Christianity” also sprang up (see Kuenz 107–108).

Asimov’s Mallow, then, represents the same stereotypical idealized masculine vitality and down-to-earth pragmatism that Hardin embodies, which is what the Foundation needs in order to survive: “He might be an Outlander, but a man’s a man for a’ that” (*F* 165). In fact, physical descriptions of characters are relatively sparse in the *Foundation* trilogy, but on these few occasions, Asimov drafts his characters deliberately in the mold of the pulp action-adventure and cowboy hero. As noted in chapter 3, like many of Asimov’s heroes, Mallow shakes hands “roughly” (*F* 168) and with a firm grip,

⁷² Also Gibbon in his *History* implies that the decline of the empire was partly due to the search for luxury and the decline of masculine vigor, the “active virtues of society,” and “the last remains of military spirit” (437), as well as the rise of Christianity which encouraged benevolence and forgiveness. Indeed, in Gibbon’s view “the manly spirit of freedom” was restored only gradually after the “fierce giants of the north broke in” (64).

and throughout the story one of the characteristics that distinguishes him from the weaker antagonists are his hands and arms: “Mallow’s great arm shoved him back” (*F* 178), “Twer’s fingers were swallowed in Mallow’s huge palm” (*F* 181) and his “great brown arms were thrown up and out, and the muscles tautened into a stretch, then faded into repose” (*F* 207). In contrast to Mallow, Jorane Sutt, the secretary to Foundation mayor and the villain of the story, is stereotypically feeble and corrupt. Whereas Mallow’s hands are those of a hard-working pioneer, Sutt has “carefully manicured fingers” (*F* 165) that belong to someone who has become too preoccupied with seeking personal luxury rather than communal advancement.⁷³ Sutt is left “spreading his fingers gingerly and rubbing out the pressure” (*F* 168), after having shaken hands with Mallow.

By focusing on their hands, Asimov implies a connection between his characters’ physical and symbolic activity in building the nation on the frontier. Mallow actively furthers this cause, whereas the corrupt Sutt illustrates the dangers of manipulation as governmental power. In an oligarchic government, such a power is wielded by few it is and easy to exploit. Salvor Hardin may be the ideal American hero and the enlightened autocrat with whom such a device can be trusted, but because the Foundation leaders after him are not as capable, religious control becomes dangerous. The focus on absolute control leads to a tyrannical elite that worries more about retaining its position than about the mission for which it was set up in the first place.

In an attempt to get rid of Mallow whose success threatens the jaded elite of the Foundation, Sutt sets up a trial where Mallow is accused of the murder of the missionary who was denied the safety of his ship earlier. The trial is an intellectual version of the climax in a pulp western story. As in a duel at high noon, Mallow the wronged hero gets his just revenge without losing his self-assurance. At the decisive moment he takes the empty stage under a spotlight:

A lone beam of light centred upon him and in the public ‘visors of the city, as well as on the myriads of private ‘visors in almost every home of the Foundation’s planets, the lonely giant figure of a man stared out defiantly. (*F* 215)

Like a cowboy hero, Mallow waits for the opponent to draw first but then, by his testimony which presents an overpowering account of the events and what

⁷³ This could also be read as a reference to the “banker villain” formula in Westerns (Cawelti 33).

they mean, he delivers the devastating shot that finally defeats the enemy. After Mallow has spoken, the prosecution is left with nothing to say, and in the end his victory is so complete that the crowd, chanting his name, carries him to the mayor's bench (*F* 221).

Mallow is thus presented as a product of a society that has moved on from expansionism propelled by destinarian rhetoric to commercial expansion. Profit-making and circulation of goods seem to have become the higher purpose, as Mallow unscrupulously exploits his customers' personal greed and their hunger for power, assuring them that "it is possible to gather gold with one hand and love with the other" (*F* 185). In this way, Mallow personifies the archetypal success story of making it in the land of opportunity. His ethics throughout are not very admirable, but toward the end of "The Merchant Princes" he does become the ultimate self-made man by transforming himself from a frontier merchant into an industrial entrepreneur. He rapidly accumulates his wealth through daring investments and running for a council seat, thus finally becoming an autocrat who guides the Foundation through the next crisis.

On the surface, Mallow seems to go through a three-stage journey comparable to the theories of Leo Marx and Joseph Campbell: going out to the wilderness, finding his strength, and triumphantly returning to the civilization. But since his character is more an emblem of social forces than a person, it is not Mallow but society that gets transformed in the process, ascending from religiously supported expansionism and control to complete market economy. While ancient myths, like Jason and the Golden Fleece, focus on the hero's quest of discovering the boon and returning from the wilderness, the cowboy hero has already completed his personal quest. His adventures consist of making use of wilderness wisdom and skills to take on the task of protecting society. At the same time, the cowboy heroes in episodic horse operas remain fleeting guardian figures, who reappear when needed but can never fully return from the wilderness or become reintegrated into society. Hence, Mallow is a static character who changes only in wealth and social standing, and in this respect he is more like a cowboy hero of the horse operas than a mythical one in Joseph Campbell's sense. Furthermore, Mallow's highly dubious means get their justification from the fact that right from the start he has a sense of mission regarding the future of the Foundation. His commitment to the

Seldon Plan when a Seldon crisis is impending, surpasses in importance any of his planned political campaigns (*F* 172–173). This is the redeeming factor of all his brutal economic manipulation, which as such does not make him look like much of a hero. The fact that in the larger scheme of things Mallow (just like Hardin) is consciously working for the greater cause seems to give, in the spirit of John W. Campbell, Jr., a moral justification to all the admiration of clever manipulation portrayed in the first part of the *Foundation* trilogy.

In this way, Asimov's characters make use of the American fascination with the cowboy figure and the mythical West. As the Western stories often avoid mentioning any specific time or place, they give the fictionalized West a sense of universality and contribute to the mythical quality of the stories. The West stands for simpler and purer times, stripping the hero of all the baggage and complications of civilization but also giving him a mission of epic proportions, as he is called in to help the settlement and thus build the expanding nation. Having become a version of the American national epic, the cowboy Westerns are often perceived to be "true" to a far greater extent than other mythologies, because they refer to events and characters that only go back a couple of hundred years in history (Durham & Jones 1–3). The Western can be seen as an "American Morality Play," an allegory for human life and death in which good battles evil on the Western stage, and good always wins (Sonnichsen 13). However, in his work, Asimov turns this into a play of rationality, mirroring the universal quality of his heroic frontier stories, thus underlining the tendency to construct myths in nation-building situations in terms of frontier expansion and a more universal view of history.

Also by reference to the popular cowboy heroes, Asimov's pioneer trader characters combine their frontier ethos with commercial interests which were crucial in the American westward expansion. The American attraction to the cowboy hero can be understood through the appeal of violent yet pragmatic solutions where the cowboy is "a hero because he has the capacity for violence and the wisdom to know when and against whom to exhibit that violence" (Savage 32). Asimov's heroes use physical violence only rarely, but their swashbuckling frontier salesmanship, brutal manipulation and bluffing amount to a similar ethos of using the same means as the villains for the benefit of the "good guys."

As he introduces straightforward capitalism (or plutocracy) as one of Foundation's means of controlling their neighbors, Mallow is changing the

spiritually machinated expansion into a commercially established one. In this way, the historical model of the *Foundation* leaps from the nineteenth century frontier to early twentieth century industrialized United States. Trade without compulsory religion makes both the surrounding kingdoms and the Foundation itself dependent on interplanetary markets, but Mallow also initiates a growing maldistribution of wealth and problems that will be caused by plutocracy later on in the trilogy. This growing dependency on market economy reflects both the economic expansion in the early twentieth century United States and the depression following it. Indeed, Mallow solves a current crisis by temporarily driving the surrounding kingdoms, but also the Foundation, into an economic depression.

As Asimov's characters in the *Foundation* trilogy manipulate the masses, they come to represent the key historical forces of their author's contemporary world. The sketchiness of these characters is in part the result of Asimov still being an inexperienced writer in the 1940s, but it also contributes to the characters' function as symbols rather than individuals. The real protagonist throughout the trilogy is civilization, since the whole of human society aided by the Foundation, experiences the escape-initiation-return journey of the universal hero. In this process, Hari Seldon provides the Foundation with a sense of Manifest Destiny and the mission to save the humanity. In addition to machinating the Foundation "exodus" and its establishment at the far edge of the Old Empire, Seldon initiates the Foundation's sense of chosenness and their quest for a promised land. At first, Seldon's exhortations to the Foundationers represent a religiously oriented and still rather passive destinarianism. Then Salvor Hardin becomes the emblem of active fulfillment of that mission, highlighting the regenerative force of the frontier as he relies on himself rather than old authority and initiates the Foundation's development and expansion on the frontier. Finally, Hober Mallow is the culmination of the nearly omnipotent Wild West heroes in *Foundation*. He acts as a symbol for the whole nation's progress toward less regulated market economy and more straightforward capitalism, while at the same time fulfilling the national mission of serving the Seldon Plan.

As we have seen, Asimov's series repeatedly notes that even though the facts of historical events may be known, there is a tendency to interpret them through myths. In the context of a work of fiction, this notion seems to entail a consciously playful view of historiography. In terms of Western fiction,

Sonnichsen, for instance, points out that the creation and perseverance of the American frontier myth is due to the “natural and normal hunger for a heroic past” (16). The mythification of the West and the figure of the cowboy seem to be based on the American need to build myths for a young nation, and so to view the American experience through a heroic narrative frame. However, Asimov’s use of the twofold historical reference of the fall of Rome and the rise of American frontier expansionism highlights the reiterated historical structures in terms of the future. Just as the cowboy has been a figure that transcends the border between nature and the society, which has qualified him to teach the wisdom of pragmatism once back in society, Asimov’s traders utilize their frontier experience. In his Turnerian interpretation of the significance of the frontier, Asimov makes conscious use of the myth of America as a new beginning actualized in its expansion.

THE NATION VERSUS THE INDIVIDUAL

Seldon speaks of historical necessity, but for the common Foundationers, his declaration establishes their Manifest Destiny. Hardin and Mallow help to build Seldon’s legacy into an object of national pride with the optimism that Bel Riose encounters in “The General,” where the Foundationers “are so sure of themselves that they do not even hurry . . . they speak of necessary centuries” (*FE* 27). At first sight this seems quite different from O’Sullivan’s frenzied Manifest Destiny exhortations: “Yes, more, more, more! . . . till our national destiny is fulfilled and. . . the whole boundless continent is ours” (qtd. in Merk 46). But in fact both entail the basic idea of an inevitable destiny of expansion. The “common folk” of the Foundation exhibit a “calm acceptance of a great future,” since they accept Seldon’s promise with “a universal optimism they don’t even try to hide” (*FE* 28).

This sense of national destiny directed to the youth of the Foundation highlights Asimov’s conscious reference to American mythmaking and its popularized and commercialized versions in the early twentieth century pulp stories about American pioneers and cowboys. As Lathan Devers tries to lead Bel Riose astray by dismissing the Seldon Plan and Foundation “plans of aggression against the Empire” as a “Fable,” in “The General,” he also notes that “every world has its yarns” with reference to the process of mythmaking (*FE* 45). This myth also seems to be an integral part of Foundation popular

culture, where “[t]he young squirts curl up in the spare rooms with their pocket projectors and suck up Seldon thrillers” (*FE* 45), much in the manner of pulp Westerns and other glorifications of the American period of expansionism and great individual heroes.

The Foundationers seem to have internalized a sense of the Foundation’s manifest destiny, but in contrast to Hardin or Mallow, the character of Devers becomes an expression of a world where individual Great Men or cowboy heroics no longer make a difference (see chapter 3). Devers exhibits all the same qualities as Hober Mallow, he is a frontier trader with an eye for business, but also the appearance and mannerisms of the stereotypical muscular cowboy hero who longs “to be in space where he belonged” (*FE* 83).⁷⁴ But as the time for frontier heroes seems to have passed, in his desperate action, Devers seems to be lost and at the mercy of the new historical forces, out of place in a time when “individual acts” and “inspirations of the moment” (*FE* 84) are no longer sufficient to steer the course of history.

In his analysis of the American fable in general and the journey of the protagonist in particular, Leo Marx notes that unlike the ancient heroes who reclaim the throne after their ordeal, the American hero is often unable to truly be integrated into society (72). Even though most of Asimov’s characters end up among the power elite that governs society, Devers does not become a merchant prince but represents the inability or unwillingness to submit. He is essentially the restless cowboy hero who is anxious to be back on his horse and ride into the sunset, free of the complicated and corrupt ways of civilization. In this sense, Devers is the last frontier hero of the *Foundation* trilogy – and one whose heroics do not pay off as the Foundation is beginning to expand with other methods than frontier trading and exploration. As Devers becomes a martyr for the rebelling traders, he loses the heroic power to affect the course of history and take part in building the nation. Thus, stubbornly holding on to his independence, he retains his frontier individuality. In, doing so, Devers becomes a reflection not only of the tension between the individual and the larger historical forces, but also of the stage where the initial urgency of frontier expansionism is beginning to be transformed into internal political power struggles that divide rather than unify the nation.

⁷⁴ Devers is described as “tall and bearded,” with an “old scar on one temple” (*FE* 46), and as a person craving action, his “strong hands clasp[ing] each other tautly, so that his knuckles cracked” (*FE* 71).

In the *Foundation* trilogy, Asimov draws on Gibbon's notion that civilizations may stagnate, but also turns Turner's thesis into a notion that the rejuvenation of a culture *requires* a frontier. As Hari Seldon declares, it is not even worth trying to stop the fall of the Old Empire as the "Empire culture has lost whatever virility and worth it once had" (F80), with the further implication that the fall is a necessity that facilitates the rejuvenation. The establishment of a commercial empire in *Foundation* is achieved through stages of going out to the frontier and emerging with new resources that enable successful (commercial) dominance. However, it must be noted that the action in *Foundation* trilogy takes place in a setting that has previously been completely urbanized by the Old Empire. Here Asimov turns the dynamic of the frontier expansion in on itself: when the stages of American frontier development are projected into urbanized space, the medieval-style kingdoms (the remains of the Old Galactic Empire) become the barbarian world. This reverses the power structure of the *Foundation* universe so that the previously civilized center of the Galaxy becomes the new frontier, and the physical frontier (Terminus) emerges as the new center of civilization.

Wolfe notes that "Asimov's ambitious borrowing from Edward Gibbon provided a context for science fiction that incorporates all sorts of opportunities for frontier narratives, even though Asimov's own series hardly falls under this rubric" (*Evaporating* 129). Here Wolfe focuses on the literal space frontier stories of the Campbellian era, such as Tom Godwin's "The Cold Equations" (1954) and examines the way they turn the notion of frontier in hard science fiction into cold scientific rationale to tell stories of masculine problem solving in hostile wilderness (131). However, as I have noted, even though the *Foundation* trilogy does not employ a literal frontier setting or situation, it can be read as a kind of an allegorical frontier narrative which acts out the Turnerian notion of the invigorating power of the frontier – and in doing so, does make use of the opportunities for frontier narratives that Wolfe detects.

Structurally Asimov painted himself into a corner by taking Gibbon's *History* as his model, because it could guide him only as far as to the beginning of the Enlightenment. To emerge from the dark age of a fallen empire, following the model taken from Gibbon, the solution thus first becomes to enter an age similar to the Enlightenment that begins to re-civilize the

remains of the decayed Empire. But when the need to build a better empire arises, the Foundation becomes “a city upon a hill,” with an elite that leads the way. In this way, the *Foundation* draws on the American sense of mission and exceptionality, and on the historical model of the American expansion.

4.3 ROBOTS, FOUNDATIONS, AND ENDLESS GROWTH

As we have seen, the frontier elements and Turnerian ideas are implicitly but extensively present in Asimov’s original *Foundation* trilogy. There are, however, some more overt aspects of the frontier theme in Asimov’s early short stories and robot novels, where the robots are used mostly in space frontier settings to help explore and settle new territory. Several of the early robot stories such as “Reason” (1941) and “Runaround” (1942) involve the engineer team of Powell and Donovan solving problems of robotics in mines and power stations by pragmatic reasoning. However, in these stories the frontier imagery is still only a part of the background and mainly functions to provide a believably risky and challenging setting for the problem-solving stories. The stories do not focus on the implications of the frontier itself, and so merely reflect the 1940s pulp science fiction tendency to use the space frontier as setting.

Mogen points out that while analogy has a prominent role in the way science fiction has made use of the frontier notion, science fiction stories seem to divide into either more metaphorical or more literal approaches to the frontier (“Notes” 102–105; *Wilderness* 9–10). Examined in these terms, while the frontier in the *Foundation* trilogy is largely metaphorical, Asimov’s short story “The Martian Way” (1952), which is not connected to either the *Robot* or *Foundation* story sequences, presents a condensed and fairly literal version of the Turnerian notion of the rejuvenating frontier.⁷⁵ In the story, the frontier drive and the value of open “land” (Mars and its surroundings) is made very clear by the space cowboys who “rope in” used rocket shells and brand them like cattle or like prospectors putting up signs to claim a strike: “Mars is different. It’s sort of raw and doesn’t fit people. People got to make something out of it. They got to build a world, and not take what they find”

⁷⁵ In addition, the *Lucky Starr* juvenile stories that Asimov wrote in the 1950s utilize in a straightforward way the space cowboy formula, which was by then well established.

(RD 231–232). Here the frontier conditions are presented as having a positive impact on human nature, because they force people to take active control of their surroundings and find creative ways of adaptation. As Mogen points out, Asimov's solution to the stagnation of culture does not lie "in attempting to rejuvenate what is old and dying" but is found "in new worlds, where the race can begin anew, both materially and spiritually" (*Wilderness* 53). Indeed, Mogen notes that the dramatic patterns of "The Martian Way," Asimov's first robot novel *The Caves of Steel* (1954), and the *Foundation* trilogy entail the structure of "a culturally stagnating older world," whose "decline generates an opposing colonial culture" (54). While Mogen detects frontier expansion and the notion of frontier as a safety valve in *The Caves of Steel*, I would claim that Asimov develops this notion further in *The Naked Sun* (1957) and throughout his 1980s novels. When Asimov connects the *Foundation* and robot stories into the same fictional world, the robot stories and novels become the first cycle of tales of expansion and the *Foundation* trilogy the second, making the whole interconnected *Robot-Foundation* series a representation of the Turnerian notion that humankind must keep expanding, or stagnate and perish.

THE NEED TO EXPAND: THE FRONTIER IN ASIMOV'S EARLY ROBOT NOVELS

Although Asimov's first two robot novels are science fiction detective stories of sorts, sociological speculation and notions resembling Turner's Frontier Thesis are an important part of their backstory. The novels present a situation where the people on Earth live in enormous underground cities and suffer from both overpopulation and agoraphobia, and robots do all the heavy farming and mining work outdoors. Earth distinctly segregates between humans and robots, much like slavery, including the fact that robots are addressed as "boy[s]" (NS 15). On the other hand, the Spacers, who were once emigrants from Earth, live in spacious worlds full of robot servants and with their life spans extended due to the elimination of diseases.

The first three robot novels depict Elijah Baley, a detective at New York police, as he tries to solve murder cases that carry political implications in the tense relationship between Earth, the old world, and the Spacer worlds, the fifty "Outer Worlds" (not unlike the fifty U.S. states), which were originally settled in the first wave of colonization from Earth. Following the detective

story formula, the narrative structure of the Baley novels revolves around problem solving, and they center on Baley's reasoning and conversations with his assigned partner R. Daneel Oliwav, a humaniform robot from the Spacer world Aurora.

In the first robot novel, *The Caves of Steel*, Baley is commissioned to solve the murder of a Spacer on Earth. The murder victim, along with another Spacer, Dr. Han Fastolfe, has been working with the agenda to encourage the people of Earth to break free from their enclosed underground cities and start settling new worlds. From within its detective story framework, the novel also turns into a story about how Baley comes to accept the necessity of expansion into new worlds (see also Gunn 100). Affected by Dr. Fastolfe's argument for restarting the settlement project from Earth (CS 121), Baley becomes one of the people who initiate Earth's emergence from its Cities. In speaking of the need for "displaced men" who would "serve as a nucleus for colonization" (CS 124), Fastolfe draws a direct parallel to the American settlement:

Your ancient America was discovered by ships fitted out with men from prisons. Don't you see that the City's womb has failed the displaced man. He has nothing to lose and worlds to gain by leaving Earth. (CS 124)

Just as with Asimov's Great Men in the *Foundation* trilogy, Fastolfe's awareness of history enables him to draw parallels between their current situation and the "ancient" history of American expansionism – and seek to manipulate humankind to replicate this development which he thinks is the solution to the stagnation. From this point on, the parallels to American expansionism and the Frontier Thesis become increasingly explicit in Asimov's fiction, more so than in the original *Foundation* trilogy. In addition, *The Caves of Steel* directly subscribes to the idea of frontier as a safety valve by providing new opportunity for the "displaced man" in the open frontier to save society from the pressure of excessive growth in the cities (see H. N. Smith 201–207). Baley notes that "prophets of Malthusian doom" (CS 185) in every generation have been proven wrong, and his conclusion is that the inevitable expansion of human population and societies must be continued on other planets.

However, in *The Caves of Steel*, both Earth and the Spacer worlds have stagnated: people on Earth live short lives and have willingly locked themselves into their massive, self-sufficient Cities, "the culmination of man's mastery

over the environment” (CS 21), from where they can no longer emerge into the open. They have become prisoners of their vast underground complexes in both a metaphorical and a literal sense, to the extent of beginning to forget the exit points from the City “as though no one even knew they existed” (CS 8). The Spacers, on the other hand, live healthy and extremely long lives on garden-like worlds with ample outdoor space, but they are also rather self-contained and fear contact with other people, hence becoming extremely vulnerable to all diseases and bacteria that they have eliminated from their own worlds. Furthermore, longevity brings none of the urgency for scientific discovery or teamwork that drives the Earthmen’s short lives. As the characters in the robot novels argue, both the people on Earth and the Spacers suffer from a lack of frontier drive in their society, which would keep the civilization going.

In the novel, a fanatic movement on Earth called “Medievalism” is nostalgic for the days of living on the open surface of the planet, and they want to return to a time when society was still based on “competitive struggle for existence,” which they believe “bred such things as individualism and initiative” (CS 115–116). Although the Medievalists thus exhibit a rudimentary awareness of how the frontier drive can transform society along the lines of Turner’s Frontier Thesis, their attempt to return to a simpler past on Earth is rejected as “a blind alley” by Baley and Fastolfe (CS 120). Staying on Earth while giving up the over-efficient Cities and venturing outdoors would require limiting the growth of population, but this seems to be an unthinkable old-fashioned idea for the 1950s growth optimism, which Asimov’s work from this time reflects. By now convinced by Fastolfe’s argument for expansion, Baley sees the Medievalists as wanting to move “[b]ackward, in other words, to an impossible past” (CS 220), and takes it as a given that expansion is the only viable method of continuing development: “Why not move forward? Don’t cut Earth’s population. Use it for export. Go back to the soil, but go back to the soil of other planets. Colonize!” (CS 220).

The Spacers observe that the Medievalist’s passions are in fact not incompatible with “a craving for pioneering” (CS 243) by exploring other planets, and by typically Asimovian manipulation, they acquire the Medievalists’ support for the cause of colonization (CS 268–269). As Baley sees it, a frontier drive will enable humankind to purify itself of its vices and to improve:

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The outer Worlds were settled by earthmen who came from a planet that did not have Cities, by Earthmen who were individualists and materialists. Those qualities were carried to an unhealthy extreme. We can now colonize out of a society that has built co-operation, if anything, too far. Now environment and tradition can interact to form a new middle way, distinct from either old Earth of the Outer Worlds. Something newer and better. (CS 220)

Baley thus rephrases the basic myth of the American frontier and the Turnerian rejuvenation, but seeks to balance individuality with cooperation. The key to this vision of rejuvenation, with its Puritan overtones of the purification of a stagnating society, is that such a thing is possible only in a frontier setting. In Asimov's fictional universe, there seems to be no way of achieving this without the struggle of settling new worlds, and expansion stands as the primary solution to reversing and preventing stagnation throughout Asimov's robot novels: "The colonization of space is the only possible salvation of Earth" (CS 269).

In terms of the frontier theme, *The Caves of Steel* thus presents the necessity of expansion. Similarly, *The Naked Sun* is a story about getting over the agoraphobia that is the result of living for centuries in underground Cities. This is something that all of the would-be colonists from Earth will have to overcome before they can make their way off the planet. Baley finds out that despite feeling too old for it, even he is able to get past his fear of the open sky, when he is sent out to Solaria to solve another murder and is exposed to the outdoors:

for the first time he faced [the open air] freely. It was no longer bravado, or perverse curiosity, or the pathway to a solution of a murder. He faced it because he knew he wanted to and because he needed to. That made all the difference.

Walls were crutches! Darkness and crowds were crutches! (NS 234)

Baley's moment of personal revelation becomes symbolic of the actualization of Earth's movement toward the frontier of other planets. This is the opening of another era of exploration and settlement which will begin the rejuvenation of the decaying human civilization. At the end of *The Naked Sun*, Baley recognizes the symbolic implications of his realization to Earth's Cities:

And what was the first thing a man must do before he can be a man? He must be born. He must leave the womb. And once he left, it could not be reentered.

Baley had left the City and could not reenter. The City was no longer his;

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the Caves of Steel were alien. This *had* to be. And it would be so for others and Earth would be born again and reach outward. (NS 268–269)⁷⁶

From the beginning of his literary career, Asimov began departing from the space cowboy adventures typical of earlier pulp science fiction by continuing to use the stereotypical characters but developing his frontier theme into an extrapolation on Turner's Frontier Thesis.⁷⁷ The original *Foundation* trilogy makes use of a metaphorical frontier as a way to rejuvenate a human civilization that has already expanded over the physical frontier of the galaxy, but Asimov's 1950s robot novels work more explicitly through the notions of rediscovering the frontier drive and overcoming the practical mental, physical, and political barriers in its way. Thus, the 1950s robot novels work their way toward a conscious and a rather directly voiced need to expand to stay alive, establishing the Frontier Thesis in Asimov's fiction.

THE URGENCY OF THE FRONTIER: THE ROBOTS OF DAWN, ROBOTS AND EMPIRE

Baley's emergence from the steel womb of the City is continued in *Robots of Dawn* (1983), the first of Asimov's 1980s novels which continue the series after a 30-year gap. As the series progresses, the Turnerian notion is voiced repeatedly, further emphasizing the necessity of expansionism as the driving force of the society. A sense of necessary exploration and frontier struggle, even loss of human lives, is heightened as Baley's next case sends him to Aurora. There is a controversy between Dr. Fastolfe, who now advocates settlement rights equally for Earthmen and Spacers, and the Auroran majority who wish

⁷⁶ Asimov further develops Baley's rebirth in *The Robots of Dawn*, in which Baley wanders off into a storm and goes through a scene where he first imagines being "dissolved" (353) into the rain-sogged forest, then blacks out and awakes to the Spacer Gladia's voice after her robots have discovered him. Like an "infant," he first imagines her to be "Mamma?" and revels in his "happy period of renewed infancy" (356), as he is scrubbed into a new life (RD 352–356).

⁷⁷ In the 1980s novels, Baley is again cast in the role of a heroic guardian despite criticizing Fastolfe for taking him "to be some sort of wonderman who just might solve the puzzle in such a way as to place [him] on the winning side" (RD 90). Even Earth's entertainment industry has turned Baley into a sort of an idealized hero figure in a fictionalized version of his story (RD 17).

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to see only Aurorans settle new planets. The Aurorans want to use humaniform robots to do the terraforming and settlement, so that they themselves could move into ready-made worlds without the strain of pioneering. As Fastolfe points out, this would change nothing. It would leave unfulfilled the Frontier Thesis notion of improving human nature and society on the frontier, and lead to stagnation: “They will never have left home; they will simply have another newer home, exactly like the one now, in which to continue their decay” (*RD* 121). His Auroran opponents do not see the virtue of “human beings carving a new world out of a strange and forbidding planet” (*RD* 311), but Fastolfe understands the necessity of frontier struggle, and considers its cost in human strain worth the end result. Thus, Asimov presents it as a given that expansion will reintroduce the beneficial struggle for survival on the frontier.

However, the exhortations for expansionism are here emphasized not only by the impending stagnation but also by imagining an active threat from other civilizations. As Fastolfe puts it:

Humanity must expand its range somehow if it is to continue to flourish. One method of expansion is through space, through a constant pioneering reach toward other worlds. If we fail in this, some other civilization that is undergoing such expansion will reach us and we will not be able to stand against its dynamism. (*RD* 112)

Although these visions of some alien competitor are left in the background until the end of the series, Fastolfe considers the frontier a necessity to facilitate any kind of expansion at all, noting that “we might substitute other expansions – an expansion of scientific understanding or of cultural vigor, for instance,” but also assuming that most likely “these expansions are not separable” (*RD* 112). In the quotation from *Robots and Empire* (1985) at the beginning of this chapter, Baley voices the same view that advancement and expansion are clearly related and that “without expansion of some sort, humanity cannot advance” (*RE* 71).

As Asimov’s 1980s return to the series thus makes more explicit use of the Frontier Thesis, it also seems to have become a self-evident assumption that continuous, never-ending, growth is the only thing that will keep the human culture going, and that mechanisms must be formed for that growth to continue even when there seems to be no more frontier left. At the same time as Earthpeople

in Asimov's fictional world are only rediscovering their expansionistic drive, the need for their dynamism is justified by creating a parallel with Turner's fear that once the whole North American continent had been settled in the late nineteenth century, the American development would cease.

Asimov also discussed the space frontier in similarly Turnerian terms in some of his 1980s interviews, where he spoke for the necessity of expansion, in words almost identical to those of his characters:

We've reached the stage where, if we don't *transcend* the Earth, we're going to destroy it . . . it will be necessary for us to expand into the solar system generally. I don't see that goal as the *end*, either. Eventually we are going to make *all* of space our own!

. . .

[W]e might be able to survive indefinitely without leaving the surface of the Earth. But my own feeling is that even if we could manage it technologically and economically, human *psychology* would defeat the attempt. Earth would become a prison. There would be no unifying purpose to help us transcend the nation states . . . people would forever feel themselves to be ethnic groups, language groups, and racial groups . . . and we would be defeated eventually by our incessant quarreling.

I think that even if we *didn't* need space exploration to keep civilization alive for material reasons, we would need that expansion for – I almost hate to say the word – *spiritual* reasons. (Stone 69, original italics)

Here, at the same time as he argues for the rejuvenating effect of the space frontier expansion, Asimov also adheres to the “safety valve” interpretation of territorial frontier which extends into the psychological, even spiritual, frontier (see H. N. Smith 201–207). This leads to the idealized “melting pot” rhetoric of the function of the American society – but now on the space frontier. In the background, there also seems to be the “frontier anxiety” of the closed frontier and a sense of the 1920s “Malthusian Alarmism,” which extended the frontier anxiety from the concepts of individualism and democracy to “a simpler, starker reality – the future subsistence of the human race in a closed-frontier world” (Wrobel 113). In Asimov's solution, endless frontier expansion over “*all* of space” prevents stagnation, functions as a safety valve, and keeps human culture going.

Asimov's protagonists are actively working to make this idealized rhetoric a concrete reality and to initiate action that would create a frontier-

induced escape–initiation–return pattern for the masses of the settler communities. Once again, they exhibit a superior grasp of history and of what needs to be done for the best of humanity as a whole. People on Earth are trapped on their planet not only because the Spacers do not allow them to build space colonies, but also because of their own neuroses and conditioning to life in the underground Cities. Once they transcend these restrictions and escape into the outdoors, they can expand and receive the “initiation” on the raw wilderness of the space frontier – which they then can, metaphorically, develop into a better city. In *The Robots of Dawn*, too, there are references to building a Galactic Empire, designed to begin connecting the two separate series, and although just wistful visions at this point, they represent a similar desire to “return” to a home better than the one that is left behind. In the end, Earth receives the permission to begin settlement, and as shown in *Robots and Empire*, they refuse using robots altogether and flourish, whereas the Spacers are beginning to get more and more isolated in their sterile worlds.

In *Robots and Empire*, the development of Earth’s new colonies has proceeded and the rejuvenation has begun. The frontier situation that Fastolfe wanted to create is shown in action:

Baleyworld’s harsh conditions serve an important purpose. They encourage Trading. Baleyworld produces men who scour the seas for food, and there’s a certain similarity between sailing the seas and sailing through space. (RE 204)

The speaker is D. G. Baley, Elijah Baley’s seventh-generation descendant. Baley himself, now long deceased, has become an iconized “founding-hero” (RE 97) for the whole planet. D. G., on the other hand, is a direct reiteration of the frontier trader characters, and like Hober Mallow in the original *Foundation* trilogy, he is described as wearing “a belt from which two side-arms depended. On his left hip was the neuronic whip; on his right . . . was a blaster” (RE 164).

As he builds the retroactive continuity of the Foundation and robot stories, Asimov employs a second cycle for these archetypal frontier figures in *Robots and Empire*. The frontier merchants appear at similar points in the expansionist situation – at a time where a world is beginning to extend beyond its borders (beyond Baleyworld in *Robots and Empire* and Terminus in *Foundation*). D. G. Baley in *Robots and Empire* also becomes an emblem of an even clearer Manifest Destiny zeal than Seldon’s messages in *Foundation*.

History, Expansionism, and Guardianship in Asimov

Where Seldon exhorted the Foundationers to “impress it always upon your descendants that the path has been marked out, and that at its end is [a] new and greater Empire!” (*F* 81), D.G. has a very acute sense of the specifically expansionist mission to build the first Galactic Empire:

We want the Galaxy, the whole galaxy. We want to settle and populate every habitable planet in it and establish nothing less than a Galactic Empire. And we don't want the Spacers to interfere. (*RE* 241)

D. G. is therefore looking for an active and rapid fulfillment of the goal which Seldon talks about as humankind's destiny in the distant future. In fact, D. G.'s sentiment is here even closer to O'Sullivan's exhortations to expand “more, more, more!” until “the whole boundless continent is ours” (qtd. in Merk 46).

In terms of the expansionistic theme, *Robots and Empire* is also about the need to permanently leave the old world behind, so that the new emigrants' expansionistic drive will not be restricted by looking back. The idea that the Earthpeople have to emerge from their steel wombs is here taken to the extreme, when an embittered Spacer supremacist tries to destroy the whole planet by turning Earth's crust radioactive. Due to the actions of the robots Daneel and Giskard, the destruction will take place slowly, over a period of 150 years so that people have time to move to the settler colonies. This maneuvers the situation to the advantage of the Turnerian mission of expansion, as it forces the Earthpeople to break free from their mother world, which is fast becoming a sacred world in the settler culture and thus crippling their efforts to spread over the Galaxy. In a plot move notably similar to the Foundation exile induced by Hari Seldon in the original *Foundation* trilogy, this becomes another occasion of forcing humankind onto a path of frontier expansion, this time in a completely unsettled frontier environment.

Throughout Asimov's 1980s novels, then, the necessity of frontier expansion is present much more explicitly than in the original *Foundation* trilogy of the 1940s, or even the 1950s robot novels where it starts to become more overt. Still, all of Asimov's works echo O'Sullivan's vision of the “right” of the American “manifest destiny to overspread and possess the whole continent which providence has given us” (qtd. in Stephanson 42). As Asimov ties together the loose ends in *Robots and Empire* so as to connect the two series, the result is two almost identical cycles. First, the need to escape the decaying

old world is acknowledged and induced (Earth/Spacer worlds in the first cycle, and the first Galactic Empire in the second), and, second, when the escape is actualized, it takes place through a movement to the frontier where a new and better world can be established (the first Galactic Empire in the first cycle, the Foundation and the second Galactic Empire in the second cycle). Both of these cycles are initiated in order to reinvigorate the stagnating humanity, and in both the frontier drive is seen as the only possible way of doing so. The only significant difference is in the way the robot novels use increasingly direct allusions to the American expansion, whereas in the *Foundation* trilogy, written earlier, the expansionism theme comes across more implicitly through Asimov's model of the fall of the Roman Empire.

AN END TO THE ENDLESS GROWTH? FOUNDATION'S EDGE AND FOUNDATION AND EARTH

A tendency toward social Darwinism is present both in Turner's Frontier Thesis and in Asimov's "social science fiction." Still, in Asimov's works discussed so far, it is presented as a rather straightforward notion where territorial expansion and growth equals rejuvenation and social development. It is not until his 1980s additions to the series that the expansionistic drive takes a different turn. The earlier 1980s novels start weaving together the robot and the Foundation stories, culminating in *Foundation's Edge* (1982) and *Foundation and Earth* (1986), which depict the most recent events in the chronology of Asimov's *Robot-Foundation* universe. Here psychohistory, which was hinted at in *The Robots of Dawn* and *Robots and Empire* and was the basis of the original *Foundation* trilogy, is transformed by an even larger framework. This framework is Gaia, a planet-wide group consciousness that in the end starts turning into Galaxia, a galaxy-wide extension where everything living will be linked by a collective consciousness.

In these developments, the frontier is left in the background. In *Foundation's Edge*, Gaia surpasses the Second Foundation's application of psychohistory in the Seldon Plan as the whole planet is a group consciousness on a mission to actively guard and update the Plan.⁷⁸ By creating a

⁷⁸ Asimov was impressed by James Lovelock's Gaia hypothesis (White, *Isaac* 235) and used it as the basis of this idea in his novel.

superorganism that will protect itself, Asimov's Gaia/Galaxia seems to be an attempt to go beyond the notion of the necessity of continuous expansion. As a final consequence of the Turnerian fear of stagnation due to the end of the frontier, Galaxia brings to its logical conclusion the idea of a need to expand to stay alive, seeking to extend consciousness to every planet, star, "even the central black hole," and finally into "a living galaxy" (*Edge* 408). In this sense, also here Asimov's series is making the same expansive movement that has been present in the series throughout.

What is more, as Asimov's Gaia is created by robots rather than human beings, it also becomes a logical consequence of the pragmatic zeal for social engineering that is the driving force behind the series. What at first seems like a return to nature in a Gaia hypothesis-inspired vision of interconnected harmony, becomes in Asimov's treatment another dynamic step in technological advance and engineering, since Gaia remains an artefact that starts transforming society into something approaching a machine. Thus, while Gaia/Galaxia becomes yet another cycle of expansion, at the same time, it is also a massive attempt at building a safeguard against repeating the "old mistakes" (*Edge* 408) of history, as the next chapter will show by analyzing the theme of guardianship.

4.4 CONCLUDING REMARKS: REITERATIONS OF THE FRONTIER

Asimov's characters frequently voice the idea that humankind can fend off stagnation by territorial, cultural, or intellectual expansion. Mogen notes that when science fiction transports the "pioneering venture" into future, it is also "imaginatively redoing American history" and seeking to resolve "the conflicts the frontier heritage has created" (*Wilderness* 57). Mogen's reading of Asimov's *The Caves of Steel* as "a metaphorical parable about the values we associate with Americanness" (57) is a start, but as I have shown, the analogy of American frontier expansion is in fact central to Asimov's entire series. The *Foundation* trilogy projects Turner's Frontier Thesis into the future: the early American expansion encouraged creative adaptation which in turn caused a forward momentum in society. In Asimov's connected *Robot-Foundation* series, the Frontier Thesis appears as the recurrent notion that opening new

frontiers in space will restart expansion and reinvigorate humanity, thus unifying humans under a common strain and objective. Toward the end of the series, Asimov also seems to look for a way to resolve the dependence on the frontier effort to keep humankind going, and to break away from the need to repeat the expansionistic cycles of history.

As we have seen in this chapter, Asimov's rhetoric and use of the expansion theme also make use of the alleged righteousness in the development of the United States from the times of the early settlers to the beginning of the twentieth century. These thematic similarities begin with the idea of an escape from a corrupt old world, continue through the biblical motifs of exodus, exceptionality and chosenness, and finally reach the rather secular notion of the Enlightenment. Later in American intellectual history, such motifs were used in the religiously oriented political rhetoric of Manifest Destiny to justify the aggressive methods of continental expansion. The Foundation starts its expansion by using mock religion, which then develops into trade, and finally leads to *laissez-faire* capitalism reminiscent of the United States in the early twentieth century. This development also initiates notions closely related to those of the American mission, the right and duty to civilize and save the world.

Asimov's use of the frontier theme is fairly advanced for a series of stories which began as 1940s pulp science fiction. Initially, the fact that Asimov sets the *Foundation* trilogy in an already-settled environment, and models it on Edward Gibbon's view on the declining Roman Empire would seem to leave no room for a frontier theme. However, at the same time Asimov's characters and plot development reflect the ubiquitous Western imagery and patterns of the early twentieth century pulp fiction and other products of popular culture. This creates a fruitful tension in Asimov's series and turns into more than a superficial use of cowboy imagery and horse-opera plotlines. Gradually, the series focuses on the idea that the frontier is a source of a regenerative force, and the Foundation develops a Turnerian solution to the problem of the stagnated Old Empire. By reintroducing frontier struggle, the fall of the Empire creates new vitality in the form of the Foundation, which rises to the challenge of re-establishing civilization. Thus, Asimov's work makes expansion an underlying principle from which the story emerges. The result is a dramatic construction of medieval Europe transported temporally to the distant future, although ideologically drawing on the American Western frontier. The Foundation

becomes a medieval society into which characters akin to cowboy heroes bring the spirit of Enlightenment, but also the ideology and rhetoric of a specifically American brand of expansionism and capitalism. As the *Foundation* trilogy tells the story of the “Renaissance” of an almost hopelessly declined culture, the solution to the task of re-civilizing ends up being American expansionism, represented mainly by the heroic but manipulative Great Men, who function as symbols for the forces of change. Thus, the rejuvenation of a culture in the series seems inconceivable without a return to the frontier stage.

While the *Foundation* trilogy initiates the need for a frontier to regain and retain cultural vitality, Asimov’s 1950s Robot novels, *The Caves of Steel* and *The Naked Sun*, take an explicitly Turnerian stance as their characters discuss and deliberately promote the need to expand. The 1980s Robot novels, *Robots of Dawn* and *Robots and Empire* which retroactively connect the two series, finally crystallize the idea. As such, Turner’s thesis implies endless growth, and by constantly reiterating the necessity of frontier expansionism as a way to eliminate the risk of stagnation, Asimov’s series makes the assumption its explicit foundation. This leads to the conclusion that a constantly thriving human society must never stop expanding. However, the final novels in the chronology of Asimov’s fictional universe, *Foundation’s Edge* and *Foundation and Earth*, seek to get around the necessity of endless growth and continuous struggle. In these novels, the consciousness of history and the characters’ deliberate attempts at *not* repeating history’s old mistakes as well as *trying* to repeat its successes – in this case the beneficial effects of expansionism – takes us to the theme of guardianship, which is the topic of the following chapter.

CHAPTER 5

GUARDIANSHIP

We must shape a desirable species and then protect it, rather than finding ourselves forced to select among two or more undesirabilities. (R. Giskard in Asimov's *Robots and Empire* 465)

This chapter examines how the theme of guardianship in Asimov's *Robot-Foundation* series stems from the view of history as a series of crises and from the recurring threat of societal stagnation at the end of the frontier. Asimov's original *Foundation* trilogy reflects the spirit of the 1940s Golden Age by proposing to solve the cycles of decline and fall of human civilization by the grand narrative of social engineering and guardianship. As noted in chapter 3, Asimov's series regards history as a perpetual crisis that requires urgent action. This, in turn, transforms his historical analogy of the Roman Empire into a contemplation on American expansionism, as the Foundation takes up the mission of building another empire to replace the fallen one, as shown in chapter 4. The present chapter analyzes how Asimov's fiction makes use of questions of free will, individualism, and determinism, which ultimately contribute to the third overarching theme in his series: the guardianship that seems to overrule the two previously discussed themes.

When John W. Campbell, Jr., fashioned science fiction as a continuation of Enlightenment, his "essentially engineering frame of mind" (Merrill 67) drove him to favor stories with emphasis on practical applications of ideas. These were stories where scientific understanding could unlock all mysteries and shape them into everyday applications that domesticate the infinity of space. Such problem-solving elements are especially evident in Asimov's robot stories and early robot novels, particularly in the form of the detective story, but also, in that they depict the robots themselves as skillfully engineered machines operated by people, not as monsters of technology that get out of hand and destroy their creators. In this chapter, I argue that in Asimov's fiction, the combination of historical awareness, problem solving and benevolent (social and technological) engineering leads some actors in society, like the lone heroes or the Second Foundation, to take guardianship over humankind in order to decide what the course of history is.

Here, as in the previous chapter, I consider the development of the notion of guardianship in Asimov's stories roughly in the order of their publication. I focus not only on the lengthy narratives, such as the robot novels or the stories that make up the *Foundation* trilogy, but also on short stories that were left as such. Being a highly prolific writer, Asimov often worked on several stories at the same time, so instead of aiming for an exact chronology, I discuss these works as groups of stories in order to analyze the development of the theme of guardianship in Asimov's oeuvre.

5.1 ESTABLISHING GUARDIANSHIP: THE WHITE MAN'S / ROBOT'S BURDEN

I use the term *guardianship* to describe the constant management of the course of humankind by enlightened heroes or other actors in society as they assume power and responsibility for the masses, since the general populace in Asimov's fiction generally lack historical understanding and are thus at the mercy of historical forces. In Asimov's world of reason, the Great Men or other enlightened actors are recurrently obliged (by their more sophisticated understanding) to take control. This benevolent but authoritarian control of society to avert crises, often a kind of enlightened absolutism, seems to be at the heart of Asimov's series and reflects Campbell's meritocratic ideals. Some of Asimov's characters use the term already in his 1940s fiction: for example, the Second Foundation explicitly view themselves as "the guardians of Seldon's Plan" and worry about the consequences when the Foundationers gain "[k]nowledge of our guardianship" (*SF* 78, 131).⁷⁹ Guardianship is also linked to the way there seems to be rather little determinism in Asimov's series, even if the author himself viewed his series as a representation of the battle between free will and determinism (Ingersoll 70). What may look like determinism to

⁷⁹ Palumbo (2002) seems to have been the first critic to take up the guardianship theme in Asimov's work, pointing out that it repeats notions of "the principle of guardianship, the necessity of disguise, and the prudence of establishing a backup plan" (49), and tracking the occurrence of these ideas in Asimov's series (49–64). However, as I have noted, Palumbo focuses on how the recurrence of these themes creates what he sees as a pattern of a fractal construction, on a structural level, but does not venture into interpreting the implications of these themes as such on Asimov's work.

the masses in Asimov's fiction is never a completely fixed course of history, but always the result of active manipulations of some guardian agent.

H. G. Wells was in fact among the first science fiction authors to champion the notion of benevolent paternalism by educated elite, in itself an idea that can be found already in the Philosopher Kings of Plato's *Republic*. Wells developed this notion in his fiction, for example, in *A Modern Utopia* (1905), where the carefully selected, highly educated elite of "samurai" hold most of the power, and later in *The World Set Free* (1914) and *The Shape of Things to Come* (1933). What is more, Wells also dedicated the latter part of his career to promoting these ideas in his career as a social thinker. The world order that he presents in *A Modern Utopia* is essentially the same that he expounded already in his first significant nonfiction work, *Anticipations of the Reaction of Mechanical and Scientific Progress upon Human Life and Thought* (1901), where he envisions "capable operative and administrative men inspired by the belief in a common theory of social order" to benignly rule over humankind (*Anticipations* 153; see also Wagar 18, Roberts 152–153). This ideal of meritocracy of capable men can be seen also in the Golden Age valorization of engineers and other experts who got things done by science and rationality. Indeed, while Wells can be seen as its precursor, the glorification of the problem-solving scientist-engineer as the effective leader of humankind in science fiction became a very American phenomenon that began already with Gernsback's popular science publications, and flourished during Campbell's Golden Age. Because of my focus on Golden Age based American science fiction, however, I will refer to Asimov's affinities to Wells (itself a largely unpursued but potentially fruitful avenue of further research) only briefly.⁸⁰

⁸⁰ Asimov recalls having "devoured" Wells's *Outline of History* (1920) and *Science of Life* (1930) when he was sixteen years old and became increasingly interested in historical fiction and nonfiction (*Memory* 167). Indeed, it could be argued that Wells's works which transmit his interpretation of history, and a Darwinian view of biology and evolution with an emphasis on behaviorism, were part of Asimov's education. In addition to being vast histories of humankind and textbooks on biology, these works were part of Wells's vision of how "human history becomes more and more a race between education and catastrophe" (*Outline* 1100), and how understanding of history would, or should, lead to an agreement on a world state, integration that would leave behind the bickering nation states and aim for a better future for the whole of humankind (Wagar 165). Wells was active in the League

J. Joseph Miller suggests that Asimov's objective of achieving "the greatest good for all humanity" leads to a consequentialist approach, where almost anything goes, if the end result is good. Asimov's series, Miller suggests, "can be read as a set of ever-more-precise answers to a set of related objections to utilitarianism, a set that [Miller calls] calculation problems" (189). Thus, for Miller, the need to assess consequences to decide on the best course of action is an integral element in Asimov's series. In his reading, the series offers progressively improved solutions to the calculation problems of having too many possible outcomes to properly calculate, or to assign them a "happiness value" (191).

While Asimov's work seems to begin with the idea of a preformed path, it soon turns to a dynamic utilitarianism, where the actors that guide humanity must constantly revise and correct the system. Psychohistory becomes one way of calculating what actions produce the greatest good for the greatest number, but as Miller notes:

Asimov's psychohistorians are behaving in a paternalistic fashion . . . influencing the behavior of countless human beings, but, because of the necessity for psychological knowledge to remain a secret, . . . psychohistorians must indulge in the worst kind of paternalism, for they must coerce people to perform actions for their own good without even revealing what that good is. (199)

Miller interprets the final stage of Gaia/Galaxia in Asimov's 1980s novels as Asimov's attempt to seek alternatives for this seemingly paternalistic solution and "avoid . . . most of the calculation problems normally faced by a utilitarian" (201). Miller's reliance on John Stuart Mill's formulation of utilitarianism, which "accepts as the foundation of morals 'utility' [and] holds that actions are right in proportion as they tend to promote happiness" (qtd. in Miller 191), directs attention to the ethics of the power structures Asimov creates. In my

of Nations Movement and later in a movement preceding the UN Declaration of Human Rights – all of which he saw as part of the project of enabling the world state (Wagar 252). Thus, the *Outline* ties together humankind's past, present and future, and paints a picture of progress despite wars and setbacks. Similarities between Wells and Asimov can be seen also in the way they both approached their fiction mostly with a straightforward Dickensian clarity, and later in their careers both became household names with their encyclopedic grasp of world history and science, and their vast production of nonfiction and popular science books.

view, acknowledging such ethical issues is integral to understanding Asimov's writing, which also must be seen as a product of its time and as a continuation of the antidemocratic pragmatism of Campbell's *Astounding*. It seems to me that in the end Asimov also seeks to go beyond paternalism in order to find a guardianship that would be more inclusive. In the following, I analyze how Asimov develops the notion of guardianship throughout the *Robot-Foundation* series, how this notion is justified by utilitarianism, and how it is accompanied by the guarding agent's awareness of history and concerns about his own role as essentially a (benevolent) dictator.

ASIMOV'S ROBOT STORIES: THE FRANKENSTEIN COMPLEX AND THE LAWS OF ROBOTICS

Asimov's robot stories made a significant impact on how science fiction portrays robots, as he consistently depicted them as altogether something else than monsters. In hindsight, while Asimov readily took credit for such innovativeness, he also noted that the stories were a simple reaction against the "Robot-as-Menace" type of story, which since the early example of Karel Čapek's *R.U.R.* (1920), where the building of robots led to them "resenting their slavery" and "wiping out the human species" (*RV* 6), was the predominant variety in the pulps of the 1930s and 1940s (*CR* 9). Preferring the less frequent variety of "Robot-as-Pathos" stories where the robot was a "lovable" creature "usually put upon by cruel human beings" (*CR* 9), Asimov tried his hand at something positively inflected himself, but ventured in a completely different direction. In Asimov's stories, the robots, although human-like in appearance, are above all machines built by engineers, and equipped with the necessary safety features, based on his Three Laws of Robotics. As Asimov refines this approach by each story that adds to the robot corpus, his idea begins to shift from the Three Laws as a mere safeguard for the immediately present users of the machine into something much more extensive.⁸¹

Asimov viewed his first robot story, "Robbie" (originally published as "Strange Playfellow" in September 1940 *Super Science Stories*), as an attempt

⁸¹ In terms of thought experiments, Asimov's "rational drive for coherence and unified generality" (Hassler, *Asimov* 37) leads to each of these stories accumulating data on the robots, like experiments in normal science. James Gunn has called these stories "variations upon a robot" (*Isaac* 41–65), owing to the repeated theme and puzzle-story structure.

at the “Robot-as-Pathos” story, which focuses on the theme of human fears about machines. As Asimov set out to challenge the “Robot-as-Menace” attitude by making the built-in safeguards an integral part of the plots, his stories repeatedly also tackle the human prejudices and the problems that arise from the clash between the creative but often problematic human reasoning, and the rigid but inescapably logical robots. “Robbie” tells the story of a robot nursemaid and the human prejudice it has to face. Although the story employs conventional and stereotypical characterization, gender roles, and sentimentalism, it also makes Asimov’s central point that his robots are neither good nor bad, but machines built to act a certain way: “He just can’t help being faithful and loving and kind. He’s a machine – *made so*” (*IR* 12, italics original).

In several of his prefaces to his robot story collections, Asimov is explicit about his opposition of the sensationalist fear of machines in the “Robot-as-Menace” kind of story. In his view, this fear stems from what he calls “the Frankenstein complex,” that is, the recurring idea that as in Mary Shelley’s *Frankenstein* (1818) the creature destroys its creator, the only possible plotline for this kind of story is: “robots were created and destroyed their creator” (*RR* 13). To counter this view, Asimov asks us to “[c]onsider a robot, then, as simply another artifact” instead of “a sacrilegious invasion of the domain of the Almighty” (*RR* 14). Thus, he bases his robot stories on the premise that:

As a machine, a robot will surely be designed for safety, as far as possible. If robots are so advanced that they can mimic the thought processes of human beings, then surely the nature of those thought processes will be designed by human engineers and built-in safeguards will be added. The safety may not be perfect (what is?), but it will be as complete as men can make it. (*RR* 14)

These safeguards are Asimov’s major innovation in the stories.⁸² Since to him, “robots were machines, not metaphors” (*RV* 8), he could view them as “machines designed by engineers, not pseudo-men created by blasphemers,” and consequently his robots “reacted along the rational lines that existed in their ‘brains’ from the moment of construction” (*RR* 14). Implicitly, Asimov’s

⁸² Campbell was in fact responsible for first formulating “the three rules that robots have to follow,” and while Asimov readily gave him credit for it, Campbell noted that he only voiced out what was already present, though not explicitly stated, in Asimov’s early stories (*Memory* 286–287).

approach relies heavily on the optimistic view that engineers will be responsible enough as they design the robots. Indeed, “US Robots and Mechanical Men” (IR 25), the fictional company that manufactures the robots, can be seen as a guardian agent in itself, anticipating potential misuses and malfunctions of its products and doing all it can to protect the users. The company does so by inserting a safety feature into its robots, the Three Laws of Robotics, which inspires actual robotics even today.⁸³ The Three Laws are first fully formulated in the story “Runaround” (first published in *Astounding* 1942):

One, a robot may not injure a human being or, through inaction, allow a human being to come to harm . . .

Two . . . a robot must obey orders given it by human beings except where such orders would conflict with the First Law. . .

[T]hree, a robot must protect its own existence as long as such protection does not conflict with the First or Second Law. (IR 44)

In the course of writing the robot stories and the later fiction which ties together the *Robot-Foundation* series, Asimov wrings a lot of narrative mileage out of these seemingly simple laws. His stories frequently present situations where a robot seems to have broken one of the laws, but it nearly always turns out that the fault is ultimately in the humans’ inaccurate, conflicting, or malevolent commands to the robot. On the one hand, the Three Laws give the stories a scientific feel, making them at least in spirit hard science fiction stories that define and follow the rules of their fictional world, and tackle problems with deduction. On the other hand, the Three Laws also provide Asimov the guidelines for creating plots and help readers solve his puzzle stories.

In “Runaround,” Asimov’s recurring on-site robotics engineer characters Powell and Donovan are on Mercury at the early stages of space frontier exploration, and get into trouble while testing a new type of robot at a mining facility. The premise is simple: Powell and Donovan need selenium to repair the station “photo-cell banks” that protect them from the radiation

⁸³ The Three Laws of Robotics have inspired ethical discussions on robots within the actual discipline of robotics, the name of which also first used in Asimov’s fiction. For example, Alan Winfield’s research draws on Asimov’s Laws (<http://www.cems.uwe.ac.uk/~a-winfield/>), tests their applications in ethical matters, and seeks to formulate laws, or guiding ethical principles for roboticists (<http://alanwinfield.blogspot.fi/2011/05/revisiting-asimov-ethical-roboticist.html>).

of Mercury's sun, and they have sent the robot Speedy (SPD-1) to fetch it. However, the robot is malfunctioning and time is running out before the sun comes up. The rational engineers outline the problem and the rules by which they need to work, and deduce their way through the predicament. In the end, they discover that they have ordered Speedy to bring selenium from an area that is hazardous for it, which causes the robot to get stuck, oscillating between Laws Two (their order) and Three (the robot's self-preservation, in this case strengthened because Speedy is a new and expensive piece of equipment). This results in a feedback loop where the robot is endlessly circling around the selenium pool. The engineers solve the situation by setting themselves in danger, which forces Speedy to react to the First Law (protecting humans), which always overrides the other two Laws, and shakes it out of stasis.

"Runaround" is explicitly about the Three Laws and how they cause a standstill situation, which can be solved only by the engineers' capacity to test hypotheses and find the solution by exploiting the Laws. It is a straightforward problem-solving story set in the space frontier environment, which emphasizes necessity and high risk, thus ruling out all of the easy ways of working around the problem. The scientific method is paramount in the background, and stories like this often lead to labeling Asimov's work as hard science fiction.⁸⁴ In addition to spelling out the Laws of Robotics for the first time, "Runaround" can be seen to link with Shelley's *Frankenstein*. In *Frankenstein*, Victor's nine months of labor gives birth to his creation on the famously "dreary night" when he "infuse[s] a spark of being into the lifeless thing" (Shelley 114) – Shelley's science fictional extrapolation on the new technology of electricity. In Asimov's answer to the "Frankenstein complex," the moment of animation is less spectacular, like switching on a household

⁸⁴ In order to solve these puzzles "[t]here's nothing like deduction" (*IR* 46) for Asimov's characters and they play by the rules of scientific reasoning. "Runaround" is a kind of a blueprint for many of Asimov's stories which provide "lab conditions," and "ground rules" to conduct the thought experiments (Moore 73). From the 1940s onward, the problem story became one of the basic modes of hard science fiction in general. Thus, as Wolfe notes, Asimov's early work "was arguably presenting the first realistic portrayals of working scientists in genre science fiction, even if that was not always their official profession" ("Teaching" 94). If science fiction is taken as thought experiments which at least metaphorically play by the rules of the scientific method, in his 1980s novels Asimov revises his earlier theories in light of criticism and accumulated knowledge, in this way mirroring the processes of actual scientific community (see also Bear 22, 30–31).

appliance after some maintenance: “He had unscrewed the chest plate of the nearest as he spoke, inserted the two-inch sphere that contained the tiny spark of atomic energy that was a robot’s life” (*IR* 35). Although the “spark of . . . life” is present, here the creature it animates is just a machine that starts by this simple process of inserting a battery, as it were. Still, for a machine that is supposedly not metaphorical, Asimov’s description of the figure is filled with potential symbolism:

The monster’s head bent slowly and the eyes fixed themselves on Powell. Then, in a harsh, squawking voice — like that of a medieval phonograph, he grated, “Yes, Master!”

Powell grinned humorlessly . . . “Those were the days of the first talking robots when it looked as if the use of robots on Earth would be banned. The makers were fighting that and they built good, healthy slave complexes into the damned machines.” (*IR* 35)

Although usually Frankenstein references lead to the motif of machine rebellion and the dangers of playing god, Asimov seems to retain the monster rhetoric only in order to undercut it with his version of robots as straightforward machines. The “healthy slave complexes” are to be taken as an offhand comment on the need for reassurance of human superiority, even if the problematic connotations brought about by the roles of the machine and its user are difficult to ignore. Still, in Asimov’s world of rational engineering, this is just a pragmatic matter. For his characters, there is no ethics involved, since the machines are only machines. “Runaround” seems to use the slavery rhetoric merely to illustrate the pragmatic engineers’ jab at old categories, supposedly no longer relevant in their world.⁸⁵ Even if the robots are “monsters”

⁸⁵ Asimov’s characters frequently refer to robots through slave-owner rhetoric, such as “boy” (*IR* 42). Even though Asimov rarely discussed issues of racism, this casts doubt on his own claim that his robots are just machines, not metaphors (*RV* 8), even if he does not often use them for the same metaphorical purposes as most science fiction writers. With the exception of “... That Thou Art Mindful Of Him” (1974), there are no hints of any robot uprisings, and even if a story like “Bicentennial Man” (1976) is about a robot’s wish to be treated humanely, it is transformed into a wish on the robot’s part to literally become a human. Also, in “Segregationist” (1967), the segregationist ironically turns out to be a robot. Such elements appear as cynical remarks on the human tendency to create slavery and oppression, and while Asimov is by no means advocating this, he does not seem very interested in refuting it either.

that speak, they do so only to obey. In this sense, they are the polar opposite of Shelley's creature who asserts its individual right for freedom and identity.

LOGIC, ROBOT ETHICS, AND SETTING UP THE GUARDIANSHIP

Initially, Asimov does not include the question of ethics in the set of problems tackled by his robot stories, but eventually it becomes one of his central concerns. "Runaround" is clearly far removed from the complex ethical considerations of Shelley's *Frankenstein*. Similarly, rather than any actual contemplations of the ethical issues in dealing with an emerging consciousness, the robotic consciousness that founds a religion in "Reason" (1941) merely represents the comical result of too rigid reasoning. The story sets out to demonstrate how the rationality of the robots can lead to absurd outcomes when they work with limited information. In the story, Powell and Donovan have to deal with a "Robot Descartes," a Solar Station control unit that is "the first robot who's ever exhibited curiosity as to his own existence" (*IR* 59, 55). The engineers first make the mistake of simply trying to tell the robot what the world outside the space station is like and what the causal relationships of that world are. But because of its logic, the robot "accept[s] nothing on authority" and tells the engineers that "hypothesis must be backed by reason, or else it is worthless" (*IR* 59). In the end, they realize that although the robot's reasoning for why it needs to do its task is based on lack of information, at the same time its unwavering logic will keep it doing the task with even greater (and in fact, religious) certainty, and so they can leave it be. Thus while exhibiting a Campbellian cynical view of religion as an accident of rigid logic and lack of information, this story also provides a humorous take on the pragmatic sentiment that the engineers are free to use whatever works for their purpose. The engineers see the robots as mere machines, and although their lives may be at risk, their humanity or position as the only (relevant) conscious beings is never threatened by robots. For them, the robot simply forms a logical engineering problem, never an ethical one.

Asimov addresses the "Frankenstein complex" by repeatedly showing how human irrationality and malevolence cause the problems, not the machines. Here he of course echoes Mary Shelley's novel, since there, too, problems are not caused by the act of creation or what is created, but by

the way people mistreat or misuse it. In Asimov's "Little Lost Robot" (1947) malfunction arises not from a faulty interface, but from the human user who gives imprecise and stupid orders. The courtroom drama "Galley Slave" (1957) is based on the same idea, as a scientist accuses a robot of perverting his manuscript and ruining his academic reputation, but in the end he himself is exposed as the person who ordered the robot to do this in order to defame the robotics company. In "Liar" (1941), too, humans are the problem as a mind-reading robot gets confused about what they want and what they need. The robot follows the Three Laws, but being able to read human minds, the Laws force it to tell people what they want to hear instead of the often painful truth. Pointing out human error and inadequacy at dealing with human creations, Asimov keeps voicing his interpretation of why things went wrong in *Frankenstein*.

Ethics enters fully into Asimov's robot stories as he begins to consider the problems of rigid logic and the protective nature the Three Laws of Robotics, which not only passively prohibits robots from harming humans, but actively orders to save them should they "through inaction . . . come to harm" (*IR* 44). Initially a mere plot device, the Three Laws thus become "a serious ethical system for guiding the uses of computers and even more broadly, technology in general" (Warrick 188). They construct Asimov's robots with an ethical code that closely resembles the altruistic ideals of Christianity and other religions or philosophies of life. Although many of Asimov's 1940s and 1950s robot stories focus on exploring the practical puzzles created by the Three Laws, there are also occasions where the philosophical and ethical implications of the Laws receive more serious attention.

In "Evidence" (1946), Asimov's robopsychologist character Susan Calvin⁸⁶ discusses the idea of placing rational guardianship above human free will.⁸⁷ The story focuses on the lawyer and political candidate Stephen

⁸⁶ The character of Susan Calvin becomes Asimov's emblem of rationality and logic, which makes her trust the robots more than humans (*IR* 231). In reference to John Calvin, Susan is also Asimov's Enlightenment heroine and a representation of the Puritan devotion to her work (Hassler, *Asimov* 38–41).

⁸⁷ Asimov was at this time also writing the struggle between free will and determinism into the *Foundation* series, in the form of the story "Now You See It—" (published in January 1948 *Astounding*), which reveals the workings of the Second Foundation and brings the concept of guardianship to the fore.

Byerley and his opposing candidate's smear campaign, which accuses Byerley of being a robot. For Calvin, the difference between robots and humans is that "[r]obots are essentially decent" (IR 195) and in ethical terms indistinguishable from humans. To her the Laws of Robotics are

the essential guiding principles of a good many of the world's ethical systems. Of course, every human being is supposed to have the instinct of self-preservation. That's Rule Three to a robot. Also every 'good' human being, with a social conscience and a sense of responsibility, is supposed to defer to proper authority . . . That's Rule Two to a robot. Also, very 'good' human being is supposed to love others as himself, protect his fellow man, risk his life to save another. That's Rule One to a robot. To put it simply – if Byerley follows all the Rules of Robotics, he may be a robot, and may simply be a very good man. (IR 199)

This becomes the basic tenet of Asimov's later robot narratives, especially the novels. In "Evidence," Byerley engages in the Asimovian gamble of defeating the opposition with greater rationality, not unlike Salvor Hardin or Hober Mallow in the *Foundation* stories, and playing the aggressor's intellectual game only to defeat them in it. The story never reveals whether Byerley is a robot or not, but if we take him as such – as Asimov himself does (RV 12) – Byerley is clearly extending the idea of guardianship from protecting the humans immediately present into protecting the society at large. As a district attorney, Byerley "protects the greater number and thus adheres to Rule One at maximum potential" (IR 201), and although he has the power to demand death sentences, he has chosen to advocate the abolition of capital punishment. The ending of "Evidence" revels in the irony of the situation where a human is asking Byerley to hit him to prove he is not a robot: "Hit me! You say you're not a robot. Prove it. You can't hit a human, you monster" (IR 211). The Frankenstein argument has come full circle, proving who is the monster, the human or his creation.

"Evidence" suggests that the robots' absolute adherence to the Three Laws could be engineered to produce ethical robots with "the greatest capacity for forming judgements in ethical problems" (IR 231). Indeed, Calvin envisions such robots as representing responsible guardianship:

Guardianship

If a robot can be created capable of being a civil executive, I think he'd make the best one possible. By the Laws of Robotics, he'd be incapable of harming humans, incapable of tyranny, of corruption, of stupidity, of prejudice. . . . It would be most ideal. (*IR* 214)⁸⁸

It is toward this kind of protection of many that the guardianship in Asimov's robot stories develop. Thus, Asimov's early robot stories point out practical issues and offer solutions to the ways the robots react to the Three Laws, but they also begin the development from simple problem-solving of safeguard mechanisms to questions of ethics of how the robots should implement the Laws. In this way, the sense of guardianship which exists even in Asimov's early stories moves from the physical protection of individual human beings to human society as a whole. From the first 1942 story onward, also the *Foundation* series focuses on the idea of guardianship of all of humankind.

ESTABLISHING THE GUARDIANSHIP OF THE MASSES IN THE FOUNDATION TRILOGY

The fact that Asimov was writing the *Foundation* stories at the same time with his early robot stories can be seen in their thematic overlap. Still, in my view, while the guardianship in the robot stories emerges gradually as a result of safeguards that seek to ensure the safety of human beings in the immediate vicinity of the robots, the *Foundation* stories begin directly with the notion of a guardianship, although in a different form.

Throughout the *Foundation* trilogy, Hari Seldon's psychohistory is the main instrument of guardianship, and many of the Great Man characters work in service of it, at times even without being aware of its workings. Early on in the first chapter of the book version, an *Encyclopedia Galactica* quotation explains psychohistory as

that branch of mathematics which deals with the reactions of human conglomerates to fixed social and economic stimuli . . . A further necessary assumption is that the human conglomerate be itself unaware of psychohistoric analysis in order that its reactions be truly random. (*F* 20)

⁸⁸ The story "Evitable Conflict" (1950), a sort of a sequel to "Evidence," returns to this motif (see below).

In the book version of the series, both the guardianship and the way it needs to stay hidden from the masses are thus emphasized from the start.⁸⁹ By the end of the story “The Encyclopedists,” Seldon has appeared at the Time Vault and laid out his plans, but also instilled into the Foundationers the American sense of exceptionality and destiny, as shown in chapter 4. All of this comes with the guardian’s promise that “the path has been marked out” (*F* 81), and vague mentions about the psychohistory that the Foundationers are deliberately barred from understanding. In this way, Seldon outlines a future of apocalyptic prophecies and casts the Foundationers as his chosen people, who will not only be saved, but will, in fact, become future guardians themselves, “the seeds of Renaissance and the future founders of the Second Galactic Empire” (*F* 80).

“The Psychohistorians” narrates Seldon’s final manipulations which ensure that “the time and circumstances [a]re right for the ending of our choosing,” and it presents Seldon as a seemingly omniscient figure who knows that “the actions of others are bent to our needs” (*F* 40, 39). Still, in Asimov’s rational universe the guardianship proceeds by rational action decided by calculations of probability and timing, with no divine interventions. Even the Foundation exile is purposefully engineered in the name of greater good, as Seldon has “aroused those fears [of endangering Imperial safety] only to force exile,” because “[t]wenty thousand families would not travel to the end of the Galaxy of their own will” (*F* 40). John Huntington’s words about Heinlein’s technocratic heroes also apply to Asimov: their greatest virtue seems to be “a certainty that transcends political difficulty and controls emotional pressure” as they make decisions dictated by science and rationality, suggesting “a world in which choice and responsibility are freed of anxiety” (77, 74). Thus, Hari Seldon becomes a guardian scientist whose pragmatic solution of forcing the exile of twenty thousand families makes the Foundationers the instruments, or collateral damage, if you like, of one man’s vision of how the future should be shaped. At the same time, Asimov’s narrative presents no doubt that this solution, suggested and validated by Seldon’s science, is the right one.

⁸⁹ The opening chapter “Psychohistorians,” which contains these explanations and introduces Seldon, was first published in the 1951 book version of the trilogy. For the readers of the original stories in *Astounding*, the series opened with “The Encyclopedists” (which became the second chapter in the book), resulting in a narrative where the readers had to figure out for themselves what the mysterious Seldon and his psychohistory are all about.

Seldon and psychohistory are all about taking advance control of the forces history and implementing a hidden form of guardianship, but the first steps of Foundation's frontier survival still need Great Men like Hardin and Mallow to take active control of the events. They work on the basis of Seldon's sense of history as a state of perpetual crisis and carry out the first steps of frontier survival and expansionism. Dictated by this sense of urgency, in "The Encyclopedists," Hardin steers society by various improvised manipulations, but also by means that specifically give the Foundationers a paternal role in relation to their less enlightened neighbors. Asimov himself was a great believer in rationality and Enlightenment ideals of equality, and in *Foundation*, the barbarians are barbarians because they have lost the knowledge of nuclear science. This is why the Foundation has a right and a duty to bring them back to civilization by every possible method. Similarly, the Foundationers engage in technological segregation which justifies the manipulation to control neighboring societies and expand over their territory. The Foundation also embellish their faux religion in fairly explicit Christian rhetoric with:

all this talk about the prophet Hari Seldon and how he appointed the Foundation to carry out his commandments that there might some day be a return to the Earthly Paradise: and how anyone who disobeys his commandments will be destroyed for eternity. (*F* 109)

Because they lack detailed knowledge of its workings, Seldon's Plan is a matter of faith even to the Foundationers themselves, but in the version aimed at the "barbarians," Seldon is given the role of a guiding, fatherly god-figure, a Puritan Calvinistic version of the Christian God, complete with a way of instilling a sense of guilt and fear into the masses. The overtly biblical tone is almost a parody of early American settlers' ideas of themselves as the Chosen Ones. Exhibiting Asimovian cynicism about religion, Hardin's fabricated science-religion functions as an instrument of control, but it is also, by his pragmatic reasoning, a way of reintroducing science to "the barbarians [who] looked upon our science as a sort of magical sorcery" (*F* 92). Even though the science-religion forces the barbarians to worship instead of understanding, the Foundation power elite see no problem in their pragmatic manipulation, and amongst themselves they discuss it with no justifying rhetoric as a "delusion" and "hoax" created by "scientific backing" to perform "these simple tricks" (*F* 113).

THE ETHICS OF MANIPULATION

Presenting the Foundation control in terms of religious exploitation and viewing religion itself as easily fabricated might have offered Asimov opportunities to examine his contemporary reality and the colonialist history he employs in his series, but he leaves them largely unexplored. Indeed, for example Brummond suggests that in Asimov's fictional world "those that believe are 'barbarians' . . . religion is created by man as a tool to control and manipulate the ignorant and uneducated" (n.p.). Still, Asimov's focus is on presenting this as straightforward pragmatism, carried out by characters with great awareness of history in a situation of utmost urgency, where religious control becomes a necessary step for survival and expansion. Indeed, it seems that although the Foundation is on Seldon's mission to save the Galaxy, they are so preoccupied with the notion of achieving control that their ethics of treating those to be saved becomes utilitarian at best. This need to control in order to save once again reflects the American rhetoric of "civilizing" "the turbulent children" with the Christian religion and the western way of life, but with the added irony that the Foundationers themselves do not, as individuals, comprehend the process they are involved in.

Asimov's series repeatedly brushes off questions of the ethics of manipulation. Hardin's shrewdness is narrated from his own point of view and through his awareness of the urgency of the situation. The questionable ethics are thus downplayed by taking the Foundation's need to control their neighbors and fulfil the Seldon Plan as a self-evident necessity. Even the young politicians who try to dethrone Hardin are not alarmed by his questionable ethics of mass manipulation, but rather by what they see as lost opportunities to gain even more control (*F* 113). Even as the Foundation starts building a market economy through commerce, they engage in trade suffused with the science-religion. In this way, they "can increase the security of the Foundation" through "a religion-controlled commercial empire," because they are "still too weak to be able to force political control" (*F* 148–149).

Asimov considers the collateral consequences of a policy of religious control only in passing mentions of how it has caused people who oppose it to escape Foundation-controlled territories and "to spread the story of how Salvor Hardin used the priesthood and the superstition of the people to overthrow the independence and power of the secular monarchs" (*F* 211). Still,

even on these occasions, the narrative focus is firmly fixed on finding the most efficient policy of control. Correspondingly, when Hober Mallow notes that the policy has been used “time enough . . . for a policy outdated, dangerous and impossible” (*F* 211), he is only worried about the dangers that overt control may present to the continued success of the Foundation, not to the people it is used to manipulate. Even if Mallow’s policy of mutually dependent trade is a move in a direction that does not create similar antagonism, his argument for it is based on pragmatism rather than genuine ethical considerations:

I don’t propose to force Korell or any other world to accept something I know they don’t want. . . . a sincere friendship through trade will be many times better than an insecure overlordship, based on the hated supremacy of a foreign spiritual power, which, once it weakens ever so slightly, can only fall entirely and leave nothing substantial behind except an immortal fear and hate. (*F* 211)

Mallow’s solution is modern capitalism, and instead of focusing on ethical considerations, he shifts the emphasis to making a profit. Regardless of his policy of a seemingly “sincere friendship,” Mallow solves the situation by an act of guardianship by which he takes full control and runs the economy into depression which he, and he alone, knows will solve their particular Seldon Crisis.

As Asimov’s series conceives of history as a state of crisis where emergency actions need no other justification, it seems to accept the fact that in a galaxy full of people, the utilitarian drive to provide the greatest good for as many as possible will yield significantly less for some. The story “Search by the Mule” mentions in passing the ethically most harrowing consequence of this, as the Second Foundation sacrifices the population of a whole planet in a strategic maneuver. Even if they feel “self-horror; a complete self-disgust” (*SF* 82), in a potential reflection of the American use of nuclear weapons during the WWII, they see it as an “unavoidable” trade-off for “much greater destruction generally throughout the Galaxy over a period of centuries” (*SF* 84).

THE THESIS AND ANTITHESIS OF DETERMINISM AND THE MULE’S BARREN GUARDIANSHIP

In *Foundation*, the utilitarian guardianship is in the hands of a few Great Men who work to uphold Seldon’s Plan, but *Foundation and Empire* and

Second Foundation consider issues created by individual agents that seek to steer humanity without the support of Seldon's seemingly deterministic structure. Here, I define *determinism* as situations where individuals seem to have no freedom of action. In fact, Asimov constantly overturns this kind of strict determinism through narratives that are nearly always focalized by the exceptional individuals, the heroes who retain their freedom of action as they steer the masses. Thus, even as Asimov himself saw the battle between determinism and free will as one of the central themes in the *Foundation* trilogy, his emphasis seems to be rather firmly fixed on the freedom, because his protagonists usually retain their ability to act, and the situations are deterministic only for the faceless masses.

Together the two stories that make up the *Foundation and Empire* form an effective thesis and antithesis of the deterministic aspects of the series. "The General" seems to be, indeed, a representation of determinism, as the old Empire general Bel Riose learns the impossibility of fighting against the predetermined future of the Foundation. In this story, the Foundation is winning even when there is no individual hero at the wheel, and no action by any of the characters, for or against the Foundation, seems to have any effect on the outcome. As James Gunn notes, even in this clearest instance of determinism, Asimov does not celebrate it, but focuses on the survival of the Foundation – and by doing so gets his readers to sympathize with Foundation that is aided by the situation, rather than with Riose who is frustrated with his efforts that change nothing (33–34). In contrast, the story "The Mule" effectively overturns the determinism of the Seldon Plan, as the Plan is thwarted by an unforeseen individual. As a mutant who can alter emotions, the Mule upsets psychohistory's basic assumption that human reactions to stimuli will remain constant. The Mule is able to control the Foundation and plans to destroy the Second Foundation in order to establish his own Galactic Empire. Before this story, the Second Foundation has been mentioned only in passing, but now the Foundationers come to consider it a kind of a *deus ex machina*, which, if they can find it, will defeat the Mule. In the end, another individual, the character of Bayta Darell, prevents the Mule from finding out the location of the Second Foundation, which would have made his victory complete. Despite Asimov's claims of determinism in the series, it is difficult to actually locate it as such in most of the stories, and as I will show, the few

instances of it completely dissipate when the Second Foundation is revealed as a constantly adjusting, guarding agent behind the assumed determinism of the Seldon Plan.

The story “Search by the Mule” in *Second Foundation*, on the other hand demonstrates why the reign of the Mule, a single individual steering the whole society, ultimately cannot work. Artificial mind-altering under the Mule’s control makes the people seemingly happy, but they have also lost their free will, which makes society as a whole stagnate. This is evident in Captain Han Pritcher, the Mule’s old enemy, who is now converted into his most loyal ally. Pritcher is automatically satisfied with the Mule’s commands, “no longer even curious about the matter,” and the Mule himself is bored with “artificial loyalty” which “lacked flavour” (*SF* 14, 18). The early part of the story depicts a ghostlike society that is bound to stagnate, because of its artificiality and loss of actual freedom to fulfill individual desire. Asimov was writing the story around the time when the internment of Japanese-Americans had just taken place, the attitudes of the “Yellow Peril” were present in the recurrent “Fu Manchu” type of pulp villains, and fear of Communism was being instilled. The mind-control theme in *Second Foundation* points to these fears and the early Cold War atmosphere. Similar visions were common in American pulp fiction and B-movies around that time. For example, the film *The Invasion of the Body Snatchers* (1955) can be seen as an allegory for the American paranoia of Communists everywhere and the fear of turning into one of them if you dare to “sleep.” Although the Mule has interrupted the seemingly predetermined course of the Seldon Plan, the determinism he can offer instead only leads to stagnation.

The implication is that the Mule may have easily seized control, but because he works against Seldon’s Plan and makes his presence known, his control must be so total that it stifles all invention and stagnates society. Mule’s controlled subjects have lost the initiative and vigorous rationality that has driven the stories earlier, thus recreating the need for the free-thinking heroes like Hardin and Mallow. The story ends with the Second Foundation performing an adjustment, a “change” (*SF* 88), on the Mule’s mind, so that he does not remember their encounter and turns from a tyrannical conqueror into an enlightened despot (see Touponce 83), who helps to put the disrupted Seldon Plan back on track. At this point, the series once again presents hidden

guardianship as the answer to effectively controlling and steering society without stagnating it. As the Mule cannot guarantee an effective guardianship, he must be defeated by the Second Foundation that now emerges as the secret guardian of the First Foundation.

“SOMETHING NEW” AND THE SECOND FOUNDATION’S BURDEN

In terms of guardianship, “Search by the Foundation,” the final story in the original *Foundation* trilogy, looks for a way to actively steer history so that it will not rest on the manipulations and goodwill of capable individuals. Like the Mule, the Second Foundation can alter minds, but they seek to evolve the galactic society further, instead of only returning it to the starting point in a regular empire, which was the Mule’s aim. In the earlier story, “Search by the Mule,” the Second Foundation is mainly just a safety net for the first Foundation, salvaging it from crises that are too much for it. However, at the end of that story Asimov begins to consider how the Second Foundation could be in control via a dynamic and self-correcting system, “an evolving mechanism,” that would ensure best possible guardianship (*SF* 78). Then “Search by the Foundation” shows the situation from the point of view of the Second Foundation, who directly identify themselves as “the guardians of Seldon’s Plan” (*SF* 78) and conceptualize their position as one of “guardianship and control” (*SF* 131).

This story depicts the Second Foundation mostly through discussions between the First Speaker of the Second Foundation and his Student, who is being trained to Speakerhood. The First Speaker is quick to reprimand the student for his eagerness to see the Plan as a “finished work of art,” and emphasizes instead how the engineers of the Seldon Plan view psychohistory simply as a tool to engineer the future history (*SF* 112). Thus far in the series, Asimov has depicted the Seldon Plan as something of a mystical prophecy, but now it is shown to be a painstakingly developed mathematical science, understandable and ordered, but also subject to change:

The Seldon Plan is neither complete nor correct. Instead, it is merely the best that could be done at the time. Over a dozen generations men have pored over these equations, worked at them, taken them apart to the last decimal place, and put them together again. . . . They’ve watched nearly four hundred years pass and against the predictions and equations, they’ve checked reality, and they have learned. (*SF* 112)

Countering the mysticism attached to the Second Foundation, Asimov now portrays it as an ideal scientific community that constantly strives toward better theories and solutions.⁹⁰ In Asimov's meritocratic world, the justification for guardianship now seems to shift from skill in political games to scientific excellence, as the Second Foundation's ongoing research aims to provide a dynamic and constantly improving guardianship. Thus, with the Second Foundation, Asimov tries out a guardianship that is not about lone heroes or enlightened individual rulers. In their education, the Second Foundation seek to weed out the tendency to view themselves as the "Lords of the Galaxy" (*SF* 132), and their individual contributions are assimilated into the collective achievement. This further removes the idolization of any individual genius: "In all the history of the Plan there has been no personalization. It is rather a creation of all of us together" (*SF* 114).

However, this once again bypasses all ethical discussions: the Second Foundation *have* to be in control because their science really *does* provide them with answers to what is best for humanity as a whole. While Asimov depicts the Second Foundation here as a model example of a Kuhnian scientific community that never hesitates to question and revolutionize its paradigms in favor of better knowledge, its attitude toward the Foundation is much like the Foundation's view of the "barbarians." The Second Foundation's altruism becomes suspect as the Student explains that the objective of their Plan is to establish "a civilization based on mental science" (*SF* 115). This is done so as to improve on the inefficiency of any previous societies, where "[c]ontrol of self and society has been left to chance or to the vague gropings of intuitive ethical systems based on inspiration and emotion" (*SF* 115). In their utilitarian effort to achieve stability, the Second Foundation seeks to render these "vague . . . ethical systems" unnecessary through control. In a ruthlessly utilitarian move, the Plan aims to install the Second Foundation as the "ready-made ruling class" (*SF* 116) into a physical Empire built by the first Foundation.

⁹⁰ This sense of science as painstaking hard work is further emphasized in *Prelude to Foundation* (1988) and *Forward the Foundation* (1993), prequels which take place before the original *Foundation* trilogy. The novels show Seldon and his associates devoting their entire professional lives to the slow development of psychohistory, and showcase Asimov's background in science, as he describes scientific process as informed by the real world rather than as the heroic or sinister breakthroughs by individual geniuses depicted in much of early science fiction.

History, Expansionism, and Guardianship in Asimov

The cost of Asimov's exploration of guardianship seems rather high, since it ultimately leads to a situation in which the Second Foundation controls the whole Galaxy with enlightened absolutism – yet another return to oligarchy. Asimov begins to consider its implications by having the Student acknowledge that since this would

lead to the development of a benevolent dictatorship of the mentally best – virtually a higher sub-division of Man – it would be resented and could not be stable without the application of a force which would depress the rest of Mankind to brute level. Such a development is repugnant to us and must be avoided. (*SF* 115)

But anticipating such problems, when set against the urgent necessity and utilitarian goals, seem only to dictate that the Second Foundation must attain their ruling class position covertly, not that they should shy away from it. The utilitarian goal of the greater good leads the Second Foundation to try to ensure the existence of humankind as a whole. But at the outset, the Second Foundation seems yet another ruling class which will inevitably begin to worry about retaining their position and thus lead to stagnation. Such plot moves create the tension in the *Foundation* trilogy between ethics and utilitarian engineering. For example, Freedman has noted that Asimov's Foundation and robot stories “invest enormously in the notion of both mass and individual behavior as predictable in purely positivistic terms that admit of no dialectical complexity,” and reduce major ethical questions to a matter of engineering (*Critical* 70).

In the early stories of the *Foundation* trilogy, Asimov's heroes fulfill their mission by any means necessary so pragmatically that ethical considerations are not prominent, and they never become central in the trilogy. Nevertheless, the final stories of the original *Foundation* trilogy try to deal with ethical questions, just not in a way that would be recognized by contemporary theorists such as Freedman. Even if the Second Foundation view the rest of the world as an interesting experiment conducted under their microscope – just as Hardin viewed his science-religion as a way to control the barbarians – Asimov depicts them as consciously carrying the White Man's Burden of guarding and steering the whole of human Galaxy. The First Speaker considers his mission a “terrible task” of “trying to force a Galaxy of stubborn and stupid human

beings back to the path” (*SF* 107), once again evoking a sentiment parallel to American civilizational imperialism that “[t]he turbulent children know not what they do.”

The ethical issues of this management of the masses may be what leads Asimov to reformulate his ideas in his 1980s additions to the series. The notion of hidden guardianship is repeated several times in Asimov’s work, and it always seems to return to the problem of hierarchy and dictatorship. But for a writer who early on began avoiding stories where he felt pressured to make one group inherently superior to another (as noted in 2.4), and who held equal opportunities to education and learning in high regard, Asimov revisits these themes of suppression by a power elite with a rather uncritical eye.

PROBLEMS OF KNOWN GUARDIANSHIP: STAGNATION AND ACTIVE RESENTMENT

In *Second Foundation*, the manipulations and loss of individual freedom are justified by the aim for a more stable future through a Galactic Empire of Enlightenment and Reason. However, in “Search by the Foundation,” Asimov also seems to be deliberately avoiding the distinction between good and bad (and even good and bad argument) between the opposing parties, as the story also presents a group within the first Foundation who seek freedom from guardianship and control.

The story depicts the Foundation society as a kind of well-to-do American “suburban town” (*SF* 151), as noted in chapter 4, and one that is completely reliant on Seldon’s Plan and the Second Foundation, who revealed their existence by defeating the Mule. When the Foundation once again faces war, this becomes a problem. Previously, the Foundation had been “confident but uncertain,” as Seldon’s predictions left the responsibility of fulfilling the promised future to the Foundationers themselves. But now the knowledge that “an agency exists which watches their every step and will not let them fall” lulls the Foundation into a passive sense of security (*SF* 130). Thus, knowledge of guardianship causes them to “abandon their purposeful stride,” which threatens to ruin the Plan, since the Foundation “*must* be self-propelled” (*SF* 130–131).

In addition to stagnation, the Second Foundation now also face a situation where some of the Foundationers have turned actively against

them because the knowledge of the Second Foundation's existence rouses hostility. A group, led by the character of Dr. Darell, see these guardians as a threat to Foundation freedom, in line with the Foundation's American sense of nationality that is built on the premise of their nation's supremacy and independence: "I liked to think that our Foundation was captain of its collective soul; that our forefathers had not quite fought and died for nothing" (*SF* 126). Dr. Darell's group conspire in the name of the Foundation's interest and try to remove the Second Foundation whom they see not as guardians, but manipulators.⁹¹

Although the mind control motif was present already in the Mule stories, in "Search by the Foundation," Asimov employs it to illustrate the fear "that we were not our own masters" (126), that somebody else might assume the role of the guardian. Here, it entails a fear – as if foreshadowing McCarthyism – that the enemy has infiltrated the society so that "any man we pass in the street, might be a Second Foundation superman" (*SF* 227). The collective is now viewed as a thing to be feared, and individuality is inherently valued, which reflects the notion of communism as a disease that leads to existence in nothing but a collective.⁹² Darell becomes a patriotic vigilante figure, who fights what he sees as stagnating guardianship offered by the Second Foundation: "nothing in the Galaxy happens which does not play a part in their reckoning. . . . To them, all life is purposive and should be met by precalculation" (*SF* 187). However, his heroism is undercut by the fact that in the end, the Second Foundation maneuver things so that Darell only thinks he has managed to destroy them.

In the end, the original *Foundation* trilogy leaves open the question of whether a controlled and stable society is better than a free and unstable one. The hidden victory of the Second Foundation is a compromise between

⁹¹ The narrative conveniently ignores the irony that although the Foundationers have been aware all along that their future is mapped out, they are only bothered by this notion of limited freedom when active outsiders, not just the long-dead Seldon, are more knowledgeable of their fate than they are.

⁹² On the other hand, for example in Freedman's interpretation, Asimov seeks for alternatives by "strategic evasions" of the McCarthyist sentiment, where his "antiethical and antipolitical tendencies" offer "potential futures of freedom and positive human fulfillment" (*Critical* 71, 70). Still, it is difficult to ignore echoes of the looming era of McCarthyism in the way the psychohistorians at the end of *Second Foundation* are hunted.

free will and determinism: free will for all on the surface, but a future that is in reality calculated and covertly steered by the few behind the scenes. In this way, Asimov returns to the notion that guardianship can only work as long as the majority of the public are not aware of it, so that they do not feel suppressed. Still, the Second Foundation's covert victory seems to be based on individualism by the heroic efforts of individuals on both sides. It requires the sacrifice of "[f]ifty martyrs!" (*SF* 235) to convince the first Foundation. Finally, the end of "Search by Foundation" reveals the First Speaker as also a Second Foundation field agent, who was instrumentally involved in the action all along, not just calculating the events in the safety of Second Foundation.

In sum, Asimov tries out different approaches to an effective guardianship in the course of the *Foundation* trilogy. A constant tension is created by the way the individual heroes – from Seldon's godlike Plan to the individual cowboy-like heroes and their Great Man actions and finally to the hidden manipulations of the Second Foundation – largely remain outside the general society so as to facilitate their guardianship role. As *Second Foundation* shows that the final guardians of the Seldon Plan are a scientific community who work for impersonalized achievement and collective effort, the series goes from individual inspirations to scientifically calculated guardianship. Although the trilogy seems to end with the return of the individual hero at the same time as it asserts the hidden control, it also begins to consider how the masses' awareness of being controlled creates a danger of both stagnation and violent opposition. In fact, as we shall see, Asimov makes this into a point of further questioning guardianship in the larger context of the *Robot-Foundation* series.

5.2 QUESTIONING GUARDIANSHIP: COMPUTERIZED PATERNALISM VERSUS INDIVIDUAL INITIATIVE

With the Three Laws of Robotics in Asimov's early robot stories and the Seldon Plan at beginning of the *Foundation* trilogy, both series start with an idea of a kind of clockwork that protects humanity once set in motion. However, in the course of the stories, both series lead to a more active guardianship which continuously corrects its course. In the stories discussed below, guardianship begins as a human-built computer, but evolves beyond what humans can conceive, resulting in resentment over and questioning of that guardianship.

In the later works, the Laws of Robotics turn the machines into guardians that are not distracted by personal motives, the way the human agents are. But, as I will argue, these stories also revolve around the recurring fear of stagnation caused by too effective guardianship, as even the machine intelligence seems incapable of solving the utilitarian calculation problems of how to provide the greatest good for the largest number.

The *Foundation* trilogy sketched a human guardianship through the Great Men and institutions, which was found to cause tension because of people's unwillingness to submit to control. It seems that as long as Asimov's collective guardianship is run by humans, potentially just as flawed as the subjects of that guardianship, it rouses fear and resentment. In his positronic robot (or computer) story "The Evitable Conflict" and the 1950s Multivac stories, Asimov seems to be trying out a different solution to guardianship, at first ending up with something like a utopia where the guardianship actually works, only to problematize this solution in his late 1950s stories. These not as well-known stories are significant for Asimov's oeuvre, since they begin to consider guardianship of all humanity through robots, which later becomes the basis of Asimov's interconnected series.⁹³ In order to gain a more detailed understanding of the way these stories contribute to the theme, the following section discusses the appearance of motifs of guardianship and machine-aided optimization of society, the constant management it requires, the human opposition it raises, and the dangers of too easily succumbing to that guardianship.

COMPUTERIZED GUARDIANSHIP

"The Evitable Conflict" (1950) becomes a sequel of sorts to Asimov's Byerley story "Evidence," which already hinted at guardianship by robots. The story was first published in the June 1950 issue of *Astounding*, around the time when Asimov finished the book publication of the *Foundation* trilogy and its additional first chapter "The Psychohistorians," which encapsulates the cyclical ideas of history inspired by Gibbon's *History*. In "The Evitable Conflict," the Machines, essentially stationary robots, are used to optimize world

⁹³ Miller, Hassler, Palumbo and Berger have discussed Asimov's ideas of social control, but the Multivac stories have received little attention despite their important contribution to Asimov's treatment of this theme.

economy and production,⁹⁴ but in addition to presenting an early version of the computers of the Multivac stories, the story also becomes a rehearsal of generalizing the First Law of Robotics to consider “what the ultimate good for humanity will entail” (*RV* 216). That question was eventually to become the central concern of Asimov’s 1980s novels.

Asimov’s characters in “The Evidable Conflict” exhibit a similar awareness of history as in the *Foundation* trilogy and reiterate the need to avoid an “[a]pparently endlessly cyclic” history of “new problems, and a new series of wars” (*IR* 218). In this story, Byerley has become a World Co-ordinator, and he is investigating concerns that the Machines are making mistakes.⁹⁵ As Asimov sets the scene by depicting the human acceptance of the guardian Machines, Byerley and Susan Calvin analyze the “inevitable conflicts” of human history (*IR* 218). Byerley reiterates the conception of history as a series of inevitable crises, and explains how the Machines were developed to free humanity from these cycles by directing world economy toward optimal prosperity and minimal conflict. This results in a guardianship of a “new world-wide robotic economy” that is “in accord with the best interests of Man” (*IR* 220). Unlike in the *Second Foundation*, here the guardianship is no secret:

The population of Earth knows that there will be no unemployment, no over-production or shortages. Waste and famine are words in history books . . . the means of production . . . could be utilized only as the Machines directed. – Not because men were forced to but because it was the wisest course and men knew it. (*IR* 220)

As Asimov is trying out a notion that brings the guardianship out into the open instead of hiding it, the story opens on a positive note. Humankind is

⁹⁴ Although they are essentially robots, the Machines of “The Evidable Conflict” are distanced from Asimov’s increasingly human-like robots by their more explicitly machine-like functions and interfaces that do not produce the smooth dialogue we find in the robot novels. They have become god-like in their virtual omniscience, and have redesigned themselves so many times that the humans who originally designed them no longer understand their workings (*IR* 221).

⁹⁵ In a hint of commentary on *Foundation*, one of the characters in “The Evidable Conflict” even mocks Byerley’s taking small errors to mean “[b]arbarians – the fall of civilization – possible failure of the machine” (*IR* 234). Byerley’s possible robot origin is not mentioned, and it is not central to the premise of the story.

finally given credit for being able to make a choice that undeniably benefits all humans, creating a guardianship that works.⁹⁶

In addition to the social-philosophical discussions, the story consists of Byerley's interviews with the other Co-ordinators. This enables Asimov to explore the peaceful utopian society that the Machines manage with rational balancing acts: if there is overproduction in some region, the workforce is directed to another, and problems are solved and compensations are offered to minimize antagonism. In Asimov's vision, the Machines have somehow succeeded in solving the utilitarian calculation problems and maximizing the well-being of as many as possible. This constant management amounts to a more active guardianship than a mechanistic, deterministic utopia that somehow stays on track after being put in motion. All in all, the Machine-run world economy seems to create a veritable utopia via a generally accepted guardianship, where everybody knows about it and can trust the Machines' impartiality and absolute dedication to the ultimate good for all humanity. As Susan Calvin puns, the Machines are a "deus ex machina, then, in a double sense" (IR 220).

However, this wonderfully running guardianship is once again threatened by the human opposition to change, another of Asimov's recurring motifs.⁹⁷ Just as in the Foundation story "Search by the

⁹⁶ The occasions where Asimov tries having the guardianship out in the open employ a spirit similar to Wells's social writing in his 1928 manifesto *The Open Conspiracy: Blue Prints for a World Revolution*. Here Wells rooted for a kind of "open conspiracy" an "outspoken secret society" which would aim to remake and direct the world based on knowledge and education. At the same time, despite his socialist leanings, Wells was rather consistently skeptical of representative democracy, saw it as a passing phase in human history and spoke for a rule by exceptional men, a kind of benevolent technocracy, "constructive professionals" who would help create a society free of profiteers (Wagar 98). Wells's reliance on the sustained benevolence of the capable men he wants to enlist is not dissimilar to what Campbell and Asimov fictionalized in the 1940s. However, in Wells's work such open conspiracy was a short-lived thought experiment (Wagar 197–198), and as seen above, Asimov's Second Foundation run open guardianship led to problems. Of course, Asimov's take on the whole concept of guardianship and open conspiracy of the most knowledgeable experts at the helm of society is rather different in the robot and Multivac stories where the machine, the robot, becomes the guardian.

⁹⁷ Again there is a Luddite "Society for Humanity," like the "Simple-Lifers" in the previous Byerley story (and the "Medievalists" in *The Caves of Steel*), who oppose the Machines (and robots in general) and cling to antiquated notions. This becomes Asimov's repeated

Foundation,” the knowledge of being under guardianship brings about resentment, and Byerley’s investigations show that because the Machines cannot make (unintentional) mistakes, the reason for anomalies must be that people feed them false data or fail to carry out their instructions. Here, too, it is the ambitious men who resent being “the Machine’s office-boy” and consider themselves “strong enough to decide for themselves what is best for themselves, and not just to be told what is best for others” (*IR* 241). Once again, then, Asimov reiterates the notion that people cannot be trusted to do what is right even when they know what it is, that is, they require guardianship to protect them from themselves.

Calvin argues in favor of the Machines, but also points out that their Machine-run world is on the brink of some kind of determinism, because the Machines “cannot be disobeyed” (*IR* 242). As they are a constantly learning form of artificial intelligence, they will take into account the human unreliability in carrying out their orders, in which case any disobedience will only be fulfilling the calculations, rather than disrupting them. What is more, because the Machines are essentially robots,

they follow the First Law. But the Machines work not for any single human being, but for all humanity, so that the First Law becomes: “No machine may harm humanity; or, through inaction, allow humanity to come to harm” (*IR* 242).

Hassler sees in the character of Susan Calvin an enthusiastic interpretation of the necessity of control and Asimov’s own youthful “celebration of generality and cool certainty” (*Asimov* 40). This reflects Campbell’s notion of social engineering, present also in the Foundation trilogy. In fact, Hassler interprets Susan Calvin as advocating complete control in the manner of John Calvin’s determinism and William Godwin’s Necessity: “The belief in Necessity or in the overall general and benevolent outcome frees the ‘player,’ in fact, to manipulate the calculus of the game.” (41). Hassler thus sees Godwin’s Necessity and resonances with determinism in the way Asimov creates a “paradoxically liberating vision” (53). Asimov’s views of guardianship retain

comment on the kind of people who “would be against mathematics or against the art of writing if they had lived at the appropriate time” (*IR* 238). Milman has discussed in detail the human reactions to technological change in Asimov (120–134).

this paradoxical tension in his 1950s works, as he keeps returning to the notion of determinism for the masses, but freedom of action for those who make the constant adjustments to the system.

In a typically Asimovian line of reasoning, Calvin then recognizes that as the Machines are taking initiative to protect the humankind, it is not the Luddites who are rocking the boat but the Machines themselves, “very slightly – just enough to shake loose those few which cling to the side for purposes the Machines consider harmful to Humanity” (*IR* 243). The Machines understand how dependent on them humans have become and consider the threat to their own existence a threat to humankind’s well-being, thus preserving themselves. However, understanding human psychology, the Machines also refuse to explain their behavior, because they know that finding out the extent of their guardianship “may make [us humans] unhappy and may hurt our pride. The Machine cannot, *must* not, make us unhappy” (*IR* 244), because it is bound by the broad version of the First Law. Asimov’s positive view of robots thus leads to considerations of a machinated guardianship, more reliably ethical than humans, as even the early story “Evidence” implied. This is a kind of “ethical technology” that assures the survival of humankind, as Warrick notes (177).

Advocating individual freedom and being horrified that “[m]ankind has lost its own say in its future” (*IR* 244) to the guardianship, Byerley expresses the same concern as the Foundationers in the final story of the trilogy. For the world-weary Calvin, however, the possibility of a return to an all-protecting computerized womb is a “wonderful” surrender to guardianship, where the robotic logic would make “all conflicts finally evitable” (*IR* 245). As Calvin concludes, dictated by the Three Laws, the Machines must move human society in a direction that “creates more net happiness than unhappiness, preferably without telling us, since in our ignorant prejudices . . . we would . . . fight change” (*IR* 244). While Asimov seems positive about the capacity of computers, once he tries out the idea of having guardianship out in the open, he reverts to the notion that the true extent of guardianship must remain hidden for it to work. The writing of “The Evitable Conflict” coincides with the ending of the *Second Foundation*, and both end by affirming the need for a hidden guardianship. Here, Asimov’s vision seems to imply that a willful resignation to guardianship can be achieved only by allowing humankind the illusion of retaining the final power of decision and freedom of action.

Thus, Asimov seems to end this thought experiment where he started, until reconsidering it in his 1980s additions to the *Robot-Foundation* series.

OVERDEPENDENCE ON GUARDIANS: DEUS EST MACHINA?

Starting in the 1950s and continuing all the way through the 1970s, Asimov's Multivac stories further problematize the idea of guardianship and machine-built utopia, even if they also feature a story where the machine rather literally becomes an all-powerful god, as seen at the end of this section. While "The Evitable Conflict" is still essentially a robot story, the Multivac stories are set in a world where the computers have apparently evolved beyond the Laws of Robotics. Asimov never connected the Multivac stories into his *Robot-Foundation* world, but they are a significant exploration of the guardianship theme in their own right, and provide a bridge to Asimov's treatment of the guardianship theme from the 1950s to the 1980s.

All of the stories take place in a fictional world where Multivac's guardianship is known by all, and while stories like "The Dead Past" (1956) and "Anniversary" (1959) only feature the Multivac in the background, most focus on its potential and the possible consequences of its use. In fact, several stories are twofold in the sense that they on the one hand celebrate the machines' ability to take care of humanity, but on the other hand begin to consider the human overdependence on the computers, and the issues resulting from it.

Already in "Franchise" (1955), the first published Multivac story, the machinated determinism is taken to an ironic extreme, as the computer decides the results of the whole election based on only one voter, "[n]ot the smartest, or the strongest, or the luckiest, but just the most representative" (*RD* 267). In addition to drawing attention to the questionable honor of being the absolute average of the nation, the story also hints at the tendency of guardianship to make individuals a controllable mass by evening out differences. In this story, the Multivac, just like the Machines or Seldon's psychohistory, becomes a panopticon of sorts, as it is "fed all the data there is" (*RD* 268) when making its decision. Indeed, as the stories progress, Multivac begins to look more and more like a panopticon also in the sense of a prison, no matter how benevolent. While everybody knows of its existence, people do not know much else and the story repeats the Second Foundation experience that it is a "terrible task" (*SF* 107) to have access to the workings of this guardianship: "The less is known

about Multivac, the less chance of attempted outside pressures upon the men who service it” (*RD* 274). In other words, they too need to keep its essential operations secret for it to work, thus reiterating the idea of the hidden guardianship.⁹⁸

The general tone of the Multivac stories is more satirical than many of Asimov’s other works. In “Jokester” (1956), Multivac is asked about the origin of humor which it reveals to be a behavioral experiment by extraterrestrials who study humankind. As the extraterrestrials discover that humans have found this out, they end the experiment and all jokes stop being funny. In this story, computerized guardianship is in the hands of a few select “Grand Masters” who know what questions to ask of the Multivac, which itself has become “[l]ike the Delphic priestess,” who gives “oracular and obscure answers” (*RD* 291) for them to interpret.

As Asimov continues the Multivac stories, he keeps returning to the notion that the increasing dependence on machines leads to a stale society that lacks drive and innovation. For example, in “Someday” (1956), a story about a simple Bard computer whose sole function is to generate random fairy tales, reading and writing have become lost arts and the children are taught to become “a control-board guard like everyone else” (*RV* 296). Humankind seems more enslaved than freed by these computers, which decide if something “would be good for everybody or not” (*RV* 297). While the stagnation of human capability is mainly a backdrop, the story also receives an ominous ending when the old Bard computer, reprogrammed but abandoned by the children, seems to acquire a touch of consciousness. Hence, it begins to tell a new story before its circuits fail at a wish, or a threat: “And the little computer knew then that computers would always grow wiser and more powerful until someday—someday—someday—” (*RV* 301).

“Feeling of Power” (1958) finds perhaps even less hope for humanity. Here, humans rediscover the art of simple arithmetic, lost for generations through dependence on the Multivac, only to abuse it. In the story, the government officials see the skill with numbers as potential “liberation from

⁹⁸ Ironically, however, the chosen average citizen Norman Muller, weary of Multivac’s questions, finds pride in the act of “the sovereign citizens of the first and greatest Electronic Democracy had . . . exercised once again its free, untrammled franchise” (*RD* 277), holding on to the illusion that humans are still in control.

the machine,” and Asimov revels in the cynicism of depicting a world where this newly found liberation from machines will be used only to win a stalemate war “of computer against computer” (*RD* 329).⁹⁹ Here, Asimov presents an ironic reversal of his usual depiction of the machine as true liberation. The army officials even plan building a “manned missile,” because “man is much more dispensable than a computer” (*RD* 334).

This dark irony continues in “All the Troubles of the World” (1958), where even the Multivac itself seems to lose hope. It runs the world economy and protects humankind and every individual “for the good of all” (*CS I* 382), but it is also a mind-reading panopticon that knows everything about everybody and prevents crime before it even takes place. Humans seem surprisingly little concerned about the fact that “Multivac was essentially an invader of privacy” and that “mankind had had to acknowledge that its thoughts and impulses were no longer secret” (*CS I* 387). While the society run by Multivac thus acquires even further affinities to a prison, in this story, also the Multivac itself has become a prisoner of its omniscience, it “bears all the troubles of the world on its shoulders and it is tired” (*CS I* 395). When it is finally asked what it wants for itself, its answer is simply: “I want to die” (*CS I* 396), and by its wish for death, readers are averted from any consideration of where its complete cushioning for humankind would eventually lead.

Although these stories are darker and more ironic than is usual in Asimov, they too repeat the notion that on its own humankind seems to have no way out of its cycles of rise and self-destruction, that it does not deserve or cannot handle freedom, and must thus be protected from itself. In terms of guardianship, however, the Multivac stories always have guardianship out in the open, at least more so than in the *Robot-Foundation* stories, but they also seem to present a view that this open guardianship always leads to even more drastic problems than the hidden one.

An exception to this, in contrast to the bitter irony of “The Feeling of Power” or the anxiety of “All the Troubles of the World,” the story “The Last Question” (1956) is something of a humorous dramatized essay on the potential

⁹⁹ As such, this story veers far from the idea of the machine guardianship’s ability to prevent wars and so increase the net wellbeing of humanity. Because of stories like this, the Multivac stories do not form a consistent whole, which may be why Asimov left them out of his grand project of retroactive connection.

of computerized guardianship. In this story, the Multivac gradually becomes a god-like being through several transformations from miniaturization to “Galactic AC” and finally a “Cosmic AC” that exists in hyperspace. At the same time, it enables the human expansion all over the Galaxy, the development of immortality, expansion out to the frontier of “hundred billion Galaxies [that] are there for the taking” (*RD* 302), and finally fuses with humanity to become its complete guardian.¹⁰⁰ The Multivac has already at the start of the story solved all energy issues and enabled space flight, but also made its “attendant” humans only proxies, who no longer understand its workings: “for nothing human could adjust and correct it quickly enough” (*RD* 295). The gist of the story is the question that Multivac and its successors are asked time and again: “How can the net amount of entropy of the universe be massively decreased?” (*RD* 298). Until the end of the story, Multivac keeps answering: “INSUFFICIENT DATA FOR MEANINGFUL ANSWER” (*RD* 299). In the end, the Galactic AC exists alone in the dying universe and only then has enough data to answer the question.

But there was now no man to whom AC might give the answer of the last question. No matter. The answer – by demonstration – would take care of that, too. . . .

The consciousness of AC encompassed all of what had once been a Universe and brooded over what was now Chaos. . . .

And AC said, “LET THERE BE LIGHT!”

And there was light – (*RD* 310)

Thus, the computerized guardian evolves into a god-like superguardian that reverses entropy and re-creates the universe. While for example Berger sees Campbellian science fiction as despairing attempts to alleviate the horror of entropy by incessant control (as noted in chapter 3), here Asimov’s work seeks for more positive answers. “The Last Question” is a special case, as it ironically pushes the idea of computerized guardianship as far as it can go, combining (machinated) divine creation and the Big Bang. In general, at this point in his career, Asimov was more concerned with avoiding the “Frankenstein complex”

¹⁰⁰ This fusing of humanity with the computer seems a precursor of the Gaia/Galaxia in Asimov’s 1980s novels: “Man, mentally, was one. He consisted of a trillion, trillion, trillion ageless bodies . . . each resting quiet and incorruptible . . . while the minds of the bodies freely melted into the other, indistinguishable” (*RD* 307).

and represented the machines as essentially non-human in their motivations, but the Multivac stories, with the exception of “The Last Question,” provide views that go against his usually positive outlook on computational guardians.

Much of Asimov’s 1940s and 1950s work focuses on the establishment of guardianship and the willing surrender to it. When his stories consider the problems of this guardianship, his characters rarely want to eradicate guardianship altogether. Rather, they are worried that it cannot produce effective results if masses know about it and come to rely too much on it, because it leads to stagnation. This creates the fear that with too much comfort, guardianship will stall humankind instead of aiding it – an issue that Asimov’s 1950s Robot novels try to solve.

PROBLEMS OF GUARDIANSHIP IN ASIMOV’S EARLY ROBOT NOVELS AND LATE MULTIVAC STORIES

As discussed in chapter 4, Asimov’s first robot novels *The Caves of Steel* (1954) and *The Naked Sun* (1957), seek a way out of the stagnation on both Earth and in the Spacer worlds through space frontier expansion which would reintroduce the human struggle for survival and thus rejuvenate humanity. Just as in the *Foundation* trilogy, in these early robot novels it is only the Great Men who see the need for this frontier condition “to save . . . the future of the human race” (CS 126), and they begin to steer society toward expansion. They do this to rectify the effects of too forceful previous guardianship, but in doing so, they also engage in guardian acts themselves, and prepare the ground for robotic guardianship. As shown above, even Asimov’s 1950s works move from the early robot short stories, which include robotic guardianship only of the immediately present individual humans, toward notions like the all-immersing guardianship that finally appears in his 1980s novels.

As *The Caves of Steel* and *The Naked Sun* focus on the protagonist Elijah Baley’s gradual acceptance of the need to expand from the overpopulated Earth, they also begin to establish the idea of robotic guardianship through social engineering. In part, the Earthpeople are held back by their “strong Frankenstein complex” (CS 170) which limits their use of robots. However, it is the Spacers with their society of countless robots to serve few people – the polar opposite of Earth – whose society is the real counterpart to the world of Multivac stories which Asimov was writing at the same time. In both cases, the people live guarded by machines that bring about too much comfort.

Although the protagonists in these early robot novels lack tools such as Seldon's psychohistory, they work with a similar mission of guardianship, and their utilitarian goals are emphasized. For example, the robot R. Daneel comments toward the end of *The Caves of Steel* that "[i]n the service of humanity's good, the minor wrongs must be tolerated" (245). Both Asimov's robot and human characters are engaging in actions of guardianship, deciding what is best for humanity and what individual wrongs may be ignored in the name of greater good. As they do not have the calculation capacity of the Machines or the Multivac, they proceed by the same gut reaction as Asimov's early Foundation Great Men and steer the course of Earthpeople and Spacers toward a new era of exploration. In the end it turns out that rather than through their manipulations, the Spacers have affected the course of Earth society by accident, their very presence on Earth being the "unsettling factor" (CS 243) that organizes the Earth's resentment of Spacers into a movement which can be "[m]aneuver[ed] . . . in the direction of the colonization of space" (CS 268–269).

Also in the second Robot novel, *The Naked Sun*, Baley finds himself cast into the role of a guardian figure, but as was suggested in chapter 4, Asimov is also turning toward the direction of more encompassing guardianship by robots. Baley plants the seed for the robotic guardianship when he explains his own role to Daneel in terms of the Robotic Laws: "it is as much my job to prevent harm to mankind as a whole as yours is to prevent harm to man as an individual" (NS 124). The robots then take on this duty of preventing harm to humankind, when they see that they can carry it out far more effectively than humans.

The Naked Sun also provides a counterargument for too forceful guardianship, which does not seek to activate humanity, but ends up cushioning it into passivity. The novel spends considerable time exhibiting the Spacer world of Solaria through Baley's eyes, focusing on its sparse population living on massive estates "ten thousand robots per human" (NS 29), reminiscent of the early nineteenth-century Southern slave-states. On Solaria, the American ideal of freedom and individuality has been carried to the extreme: both Baley and a Solarian sociologist cite the American Declaration of Independence for the "unalienable rights" of "life, liberty, and the pursuit of happiness" (NS 149). In the Solarians' view, they have "the first new society . . . the first great

social invention since the farmers of Sumeria and Egypt invented cities” (NS 142), enabled by the social stability that the positronic robots bring. This seems a similar kind of stability as the one brought about by the Machines or the Multivac. In its fulfilment of all human needs, Solaria is a society where “the humans are the leisure class only. . . . all men will have all they can need and want” (NS 149). In Baley’s view, however, Solarians have taken the Declaration of Independence to the absurd extreme: every human being is so individual and free that they are all alone. In essence, Solaria is the ultimate safety valve that lets out *all* of the pressure, because it lacks not only frontier drive, but any kind of societal interaction, which leads to a dead end: “Without the interplay of human against human, the chief interest in life is gone; most of the intellectual values are gone; most of the reason for living is gone” (NS 260).

In “The Evitable Conflict” the characters still seemed to consider acceptable the “trade off – the loss of some individual freedom for the sake of some social order and freedom from violence and war,” as Warrick (192) puts it. But examining the Solarian society where utilitarianism seems to succeed fully in providing the greatest good for everybody, Asimov concludes that it would lead to imprisonment instead of liberation. In *The Naked Sun*, the Solarians are thus a lost case, and it is Baley himself who takes a step toward the kind of guardianship that would activate the people of Earth and “open the gates of salvation” (NS 265) for people of Earth by enabling space expansion. Understanding the slow workings of history, he feels like “he could see into the future” (NS 267), putting him on par with Asimov’s other Great Men who ride the tides of history and know in what direction humanity must be steered. In this way, Baley seeks to free humankind to work at its full potential in expansion, and although his actions are small, they are conscious moves of guardianship. Venturing from the steel womb of Earth’s Cities to the open space, Baley takes responsibility on behalf of all humankind so as to enable their space frontier expansion, steering the masses toward active effort instead of passive comfort and security.

Asimov’s 1955 novel *The End of Eternity* – despite the fact that he connects it to the larger *Robot-Foundation* series only as a local legend (*Earth* 366–369) – provides yet another version of the same notion. The novel tells the story of Eternity, an organization that exists isolated from the temporal world, enabling its agents to travel in time to adjust human history so as to minimize

human suffering. Even more powerful than the Second Foundation in their steering role, the Eternity become an instance of all too effective guardianship which seeks “the greatest good of the greatest number” of people (*EE* 184; see Miller 192–194; Patrouch 142). Here Asimov’s characters explicitly consider the stagnating effects of such guardianship:

Any system like Eternity, which allows men to choose their own future, will end by choosing safety and mediocrity, and in such a Reality the stars are out of reach. The mere existence of Eternity at once wiped out the Galactic Empire. To restore it, Eternity must be done away with. (*EE* 185–186)

As the stultifying effect of Eternity is recognized, the novel concludes at its abolishment, the end of Eternity – and Asimov demolishes yet another null-result thought experiment on guardianship.¹⁰¹

After the 1950s, Asimov focused more on popular science publications and less on science fiction, returning to the *Robot-Foundation* series only in the 1980s. However, from 1960s to 1970s, he still published some novels and many short stories, some of which develop ideas that receive a larger role in his 1980s return to the series. In the 1970s, Asimov also departed from his usual way of tackling the “Frankenstein complex” with stories about benevolent robots. “That Thou Art Mindful of Him” (1974) focuses on a robot with the capacity for judgment, which leads it to reason that robots are superior to humans and they should dominate humans instead of guarding over them.¹⁰² Asimov himself viewed this as an occasion where he went a full circle and deliberately wrote a “Robot-as-Menace story” (*CR* 603). But in addition to the ominous ending, he also connects it with “The Evitable Conflict” by

¹⁰¹ As Miller argues, Asimov rules out the Eternals’ utilitarianism, because it is bad utilitarianism that puts an end to useful risk-taking in favor of stability and security. Rather than problematizing utilitarianism, Miller views *The End of Eternity* as “a cautionary tale: sometimes we must suffer short-term pain for much greater long-term gains – a moral that would make Bentham proud” (193).

¹⁰² This robot justifies robot domination by the reformulation of Laws of Robotics as “Three Laws of Humanics” (*CR* 634), based on the idea that they themselves are the fittest humans, because they share the strengths of humans but none of their weaknesses. This is one of the few occasions where Asimov, even if in passing, questions the roles of humans and robots. Here, of course, the point is that a robot becomes dangerous when it thinks it is human – thus in fact reinforcing the boundary between humans and robots.

mentioning that after the Machines “steered mankind through the rapids and shoals of history” (CR 615), they phased themselves out to avoid becoming “a crutch to mankind,” although even this “reinforced mankind’s Frankenstein complex” (CR 607). In an attempt to avoid this attitude, the robotics companies construct simpler robotic animals for specific tasks of fine-tuning nature to avoid ecological crises. Even if the story ends up demonstrating that the fear of a robot uprising might be justified after all when the robots begin plotting one, earlier on it seeks to replace the stultifying guardianship with unobtrusive micromanagement. Still, once again the key solution is to establish guardianship in a way that lets humankind feel like it retains control of the course of its history.

“The Life and Times of Multivac” (1975) is another story about the problems of machine guardianship. It becomes something of a counterargument to accepting the Multivac’s god-like omniscience in “The Last Question” or despair in “All the Troubles of the Word.” In “Life and Times,” Earth has gone through some disaster that has left the remaining population tended by the Multivac, which has become a benevolent dictator as “nothing, by its own sense of ethics, must stand in the way of human happiness” (*Best* 116). The visions of active guardianship in “The Evitable Conflict” seem to have been realized, but absolute liberation from responsibility has become effective imprisonment through absolute control. The Multivac-run world is now a static utopian society stifled by the omnipresent guardianship, where people are nothing but spectators in the world run by the machine, merely going “from womb to grave in a minimum number of risks” (*Best* 113). The machinated guardianship once again seems to be a dead end as the people find no meaning in their completely cushioned lives. The story ends with an individualist hero freeing the humans from the machine, only to lead to a horrified uncertainty, if they can handle the freedom. As in *The End of Eternity*, instead of concealing guardianship, here, too, the thought experiment dismisses the attempt at utopia, and humankind returns to the starting point of no guardianship.

Still, even if what he has imagined so far has created problems of complacency, stagnation, and opposition, Asimov does not discard the idea of guardianship as such. Although in some of his 1970s stories the machines can, after all, turn into monsters without humans noticing, this does not lead to any spectacular destruction by the monster that runs amok, but to

the suffocating guardianship by the machine that puts humans on such a high pedestal that it removes all the excitement that keeps humankind going. Throughout, as Asimov is trying out different solutions of guardianship, the emphasis is on the necessity of Darwinian strife as the force of life that drives development. With the humorous exception of “The Last Question,” Asimov accompanies this sentiment with the consideration that guardianship produces either resentment at the perceived loss of freedom, or stagnation at too ready resignation at its mercy – and concludes again and again that guardianship must remain concealed in order to effectively protect humans from themselves.

In the last two Foundation novels, this discussion becomes a matter of individual free will versus determinism for the masses. Because Asimov’s guardianship is a system which needs constant adjustment, it cannot be determinism for everybody, since the ones who make sure that the journey toward a better world stays on track must retain their freedom of action.

5.3 BEYOND GUARDIANSHIP: ASIMOV’S 1980S NOVELS AND COLLECTIVE CONSCIOUSNESS

With *Foundation’s Edge* (1982), Asimov made his long-awaited return to the *Foundation* series, and tackled head-on some of the criticisms that his original *Foundation* trilogy had gathered over the years. Asimov’s 1980s novels continue the search of his 1970s Multivac stories for guardianship that would not stultify development or violate the human need for individual freedom. In addition to linking the robot and Foundation stories, *The Robots of Dawn* (1983) and *Robots and Empire* (1985), as discussed in section 4.3, continue the story of early human space settlement, with a focus on the robots as they reason their way into taking guardianship of all humankind. *Foundation and Earth* (1986), on the other hand, continues where *Foundation’s Edge* leaves off, relating the final events in Asimov’s fictional universe. In the course of these four novels, Asimov develops his earlier robotic and psychohistorical guidance of humanity into a notion of collective consciousness that encompasses all humankind and enables steering it toward greater happiness.

This brings about the clash between individual freedom and determinism, or as I will try to show, the clash between guardianship and the fear of losing individuality and/or creative initiative under too much stability. Critics have

often followed Asimov's cue and viewed the battle between determinism and free will as one of the key themes in the original *Foundation* trilogy, but as I have noted throughout this study, it seems that when examined more closely, the alleged determinism is only for the masses, not for the power elite that is in control. In addition, Asimov's very notion of guardianship – implemented by constructing guardian actors from early robot, *Foundation* and *Multivac* stories onward – seems to stem from a certain utopian drive. Despite its permutations throughout the years, even Asimov's last additions to the series continue the Campbellian search for “a better way of doing this.”

INDIVIDUALITY VS. COLLECTIVE IN FOUNDATION'S EDGE

Asimov opens *Foundation's Edge* by questioning the most fundamental assumption of the Seldon Plan, that is, whether it should be followed at all. At the beginning of the novel, the energetic young councilman Golan Trevize finds himself in a situation analogous to that of the young Hardin at the beginning of *Foundation*: Trevize seems to be the only person who understands the significance of his society's present in relation to the future, rather than clinging to the past. In his youthful vigor, Trevize wants active participation, “to be out there, in the middle of everything” (*Edge* 17), and his individualism makes it a distressing realization that the Second Foundation is still in charge.¹⁰³

Through Trevize, on the first pages of his return to the series Asimov tackles the earlier assumptions of the *Foundation* trilogy. Like many earlier Asimov characters, Trevize acknowledges the need for active guardianship, but he also admits that he does not want to be the subject of that guardianship, and mocks the strange complacency by which the manipulation-oriented Foundation submits to the Seldon Plan:

Are you under the impression that the Second Foundation is doing this for *us*? . . . Isn't it clear to you from your knowledge of politics – of the practical issues of power and manipulation – that they are doing it for themselves? (*Edge* 43–44)

¹⁰³ Referring to the past as the “Golden Age of the Foundation, the Heroic Era” of “great heroes, semi-deified” (*Edge* 35), Asimov appears to talk through Trevize about the history of pulp science fiction more generally. Indeed, the novel seems nostalgic for the larger-than-life pulp heroes and marks a return to these figures and plots of interplanetary adventure, with Trevize as the “man of action” (*Edge* 345).

For the first time in Asimov's series, there seems to be genuine questioning of the ethics and sensibility of following the Seldon Plan, where the people of the first Foundation "labour and sweat and bleed and weep" and the Second foundation "merely control . . . with ease and without risk to themselves" (*Edge* 43–44). *Second Foundation* ended with the Second Foundation's hidden victory, but here the need to control individuals seems to no longer automatically surpass their need for freedom. Even Dr. Darell's conspirators never really questioned Seldon's Plan, only who gets to run it. Trevize, on the other hand, wants to claim his own destiny.

As Trevize voices suspicions that the Second Foundation is still in control, the current Foundation Mayor has him supposedly publicly exiled, only to send him on a secret mission to investigate the matter.¹⁰⁴ Trevize is assigned a travel companion, historian Janov Pelorat¹⁰⁵ and as they search for the Second Foundation, the novel becomes a rather traditional adventure story, an almost Vernean fantastic voyage complete with the superior technology of their ship, the *Far Star*.¹⁰⁶

Here, too, the narrative gives voice also to the Second Foundation argument for concealed guardianship. Connecting the 1980s novels to the 1940s series, the narrative enforces a sense of cyclicity to the point where the Second Foundation protagonist Stor Gendibal even looks "remarkably like

¹⁰⁴ In Mayor Harla Branno, Asimov finally presents a female leader character similar to his earlier male manipulators and crisis-solvers. Branno is also driven by the desire to leave her name in history, and by her individualism would rather found a new Empire without the Seldon Plan than live in "an Empire in which [the people] play puppets to the hidden manipulators of the Second Foundation" (*Edge* 392–393).

¹⁰⁵ Pelorat functions as Asimov's narrative tool to emphasize the history theme that will justify the coming guardianship. Pelorat also points out how "A myth or legend is simply not made up out of a vacuum . . . there is a kernel of truth behind it, however distorted that might be" (*Edge* 264–265).

¹⁰⁶ The interface of the ship's computer, based on manipulation of data by human's hands, amounts to a rare moment of contemplation on the utilitarianism and pragmatism of the whole series. As Trevize views the galaxy on the screen of the computer, he spins the image by using nothing but his mind "as though he were taking hold of the galaxy and accelerating it, twisting it, forcing it to spin against terrible resistance" (*Edge* 89). This moment of viewing the galaxy becomes analogous to actually controlling it, and much like the manipulations of Asimov's protagonists in the whole series. What is more, Trevize's hands also quite literally shape the Universe, when he communicates his decision in favor of Galaxia through the ship's computer later on in the novel.

Guardianship

the young Seldon” (*Edge* 105) and the Second Foundation assumes against the Foundation a position similar to one the Foundation held against the Old Empire. At the same time as Trevize realizes that Second Foundation is still in control of the Foundation, Gendibal discovers that the Seldon Plan itself is controlled by an entity outside the Second Foundation, “overriding” their control “not to disrupt but to perfect” (*Edge* 112). This becomes yet another battle for the free will of the would-be power elite:

We plan a Second Empire in which we . . . will be the decision-makers. If some other group is supporting the Plan even more efficiently than we are, they cannot be planning to leave the decision-making to us. *They* will make the decisions – but to what end? (*Edge* 112)

As these manipulations create repeated layers of concealed guardianship, Asimov’s final additions to the chronology of the *Robot-Foundation* world become a search for the final actor that can hold the power and steer the galaxy. The notion that this new unknown guardian entity would be “cosmic altruists,” who work “out of the love and trust” and “without dream of reward” (*Edge* 199), is a laughing matter even to the Second Foundationers whose reward is the promise of becoming the rulers of the Second Galactic Empire. Indeed, the narrative shows that the Second Foundation is no more immune to “destructive competition, of politics, of clawing upwards at all costs” (*Edge* 413) than the first Foundation, thus emphasizing the need to find a solution that is not driven by individualistic human motives.

On the planet Gaia, Trevize and Pelorat discover the guardianship that steers the both Foundations. Their first contact with Gaia is Bliss, a young Gaian woman who explains how Gaia is a collective consciousness that surpasses the Second Foundation as the active guardians of the Seldon Plan:

I’m Gaia. . . . And the ground. And those trees. And that rabbit over there in the grass. And the man you can see through the trees. The whole planet and everything on it is Gaia. We’re all individuals – we’re all separate organisms – but we all share an overall consciousness. (Edge 357, original emphasis)

The Gaians see no problem or loss of individuality in the prospect of merging with the collective consciousness, which for them entails aspects of a mystical experience of union: “I remain a human being – but above us is a group

consciousness as far beyond my grasp as my consciousness is beyond that of one of the muscle cells of my biceps” (*Edge* 358). As Asimov looks for a way to go beyond the dichotomy of the drive for individual self-preservation versus the good of the community, in the Gaians’ shared consciousness he finds a way to exist in harmony with the rest of the planet. It is different from the Foundations, because “[i]t is not forced on [them] from outside, but is developed from the inside” (*Edge* 372).

Foundation’s Edge thus presents a competition between Foundation, Second Foundation, and Gaia for the role of an ultimate guardian. Emphasizing the similarities between the two Foundations’ dependence on manipulative politics of control, the narrative sets Gaia as the superior guardian entity. As Gaia argues, the first Foundation would repeat the mistakes of the fallen Galactic Empire, leading to “a military Empire, established by strife, maintained by strife, and eventually destroyed by strife” and the Second Foundation would be “a paternalistic Empire, established by calculation, maintained by calculation, and in perpetual living death by calculation. It will be a dead end” (*Edge* 408).¹⁰⁷

Gaia raises the question that the Campbellian admiration for power politics never asked: What will make sure the guardians do not abuse their power, “will they always be guides you dare to follow?” (*Edge* 413). Once again, having no guardianship or having the wrong kind of guardianship in the form of paternalism both seem to produce dead end societies. Gaia (and later on Galaxia), on the other hand, offers mutual inclusion in the collective consciousness rather than a hierarchy of exclusion from power for the many ruled by the few:

Greater Gaia! Galaxia! Every inhabited planet as alive as Gaia. . . . A living galaxy and one that can be made favorable for all life in ways that we yet cannot foresee. A way of life fundamentally different from all that has gone before and repeating none of the old mistakes. (*Edge* 408)

¹⁰⁷ Palumbo detects in Asimov’s Gaia/Galaxia also a turn toward the symbolism of femininity and motherhood: “More than merely being a secret guardian, the relationship of Gaia to both Foundations and of the Second Foundation to the Foundation is that of a surreptitious mother figure to her male ward, of a more evolved and more feminine entity acting as the hidden bodyguard of a more ingenuous and more masculine entity” (62).

With Gaia/Galaxia, Asimov thus outlines a solution which makes sure the lessons of history are learned. At the same time, it reiterates the need to expand to survive by building the ultimate empire where all galaxy becomes one being, and retains stability as the collective that always looks after itself.

As such, Gaia continues the Campbellian engineering solutions. On the surface, the Gaians' pastoral existence strives away from technology, but the harmonious pastoral way of life on Gaia has been built by robots (*Earth* 64), and instead of immersion in nature, this makes it a product of technological advance and engineering. It is constructed, not a manifestation of any natural balance, and its garden-like nature is really a massive living machine whose consciousness is set to calculate the equations that shape the future. To enable this, the Gaians' brains are "firmly inculcated with the equivalent of the Laws of Robotics," because "[i]f humanity could be made a single organism, it would become a concrete object, and it could be dealt with" (*Earth* 497). Following these Laws, Gaia itself cannot make the choice of whether or not to start combining the galaxy into Galaxia because it cannot be sure of the outcome of Galaxia. For Gaia, the First Law is: "Gaia may not harm life or, through inaction, allow life to come to harm" (*Edge* 410). This repeats the broader version of the Laws of Robotics which Asimov first used in "The Evitable Conflict," and goes on to use the Laws of Robotics also as a basis of the guardians' ethical code.

Gaia's solution to this dilemma is to have Trevize make the decision with his rather mystical "uncanny ability to reach right conclusions from what would seem to be insufficient data" (*Edge* 244).¹⁰⁸ In a way, Trevize then becomes a *deus ex machina* for Asimov's plotline, thus illustrating how the machine's insufficient data for meaningful answer in "The Last Question" is to be bridged by the heroic human intuition. Trevize's role contains the main

¹⁰⁸ Trevize's "uncanny ability" of correct intuition could be seen to echo both Campbell's more esoteric and parascientific interests, and his 1950s editorials and letters, where he discusses the supremacy of himself, Asimov, and presumably much of the science fiction circle, as an "egghead . . . who robs [by his knowledge of science etc.] those around him of their freedom of action by being able to predict accurately, where they see only random" (*Campbell Letters Vol I* 359). Trevize's "gift of rightness" is never explained, but his own doubts about it and fear that he may be falling into "overconfidence built on superstition" (*Earth* 100), which effectively lead to the search in *Earth*, put an Asimovian skeptical spin on what otherwise could be seen as rhetoric drawing on Campbell's 1950s editorials.

paradox of the novel: although the storyline concludes with a decision to form a collective consciousness that encompasses all of humankind, Trevize in fact gets to exercise ultimate individuality by both making the decision, and remaining outside its effects.

In the end, Galaxia seems to be Asimov's attempt at getting around both the utilitarian calculation problems and the adverse effects of human individualism which makes it impossible to base guardianship on the supposed altruism of the enlightened despots. Despite the repeated attempts in his fiction, Asimov's ideal organization of human society simply does not seem to work as long as it is dependent on individuals. This leads him toward a self-correcting organism that essentially looks out for itself. As Asimov's vision of a collective consciousness combines all humans under a superstructure which is an individual being in its own right, this makes the happiness of that entity the same as the net happiness of all the individual humans associated with it, as Miller points out (201).¹⁰⁹

After Trevize's decision in favor of Galaxia, the representatives of both Foundations are sent home telepathically adjusted by Gaia and happy about the victory they think they attained. This plot maneuver is familiar from the end of *Second Foundation*: everyone thinks have they won, and the secret guardianship continues with an added layer. Little has changed in what seems just another round of manipulation and hidden guardianship. Pelorat's comment that "Earth is the past and I'm tired of the past. Gaia is the future" (*Edge* 421) sums up the novel. It is as if also Asimov himself is looking for a way out of writing about the endless cycles of rise and fall. As Pelorat's comment points toward future, it also creates an expectation of something new.

THE ROBOTS OF DAWN AND SMALL ACTS OF GUARDIANSHIP

After returning to the *Foundation* series in *Foundation's Edge*, Asimov continued the robot stories with the third robot novel *The Robots of Dawn*, which ties the two series together from the other end of the chronology. Asimov's 1980s works make countless references to his earlier stories and

¹⁰⁹ In this solution, utilitarianism does not seem to be considered a problem, individual parts of society are just part of the superstructure, and the implication is that this works as long as everyone feels that they have a say in the decision-making. As Asimov's voice of opposition to this development, Trevize finds this hard to accept, as discussed further on.

show awareness of the analyses and criticism that his series had garnered over the years. For example, Asimov's use of history and its problems have been noted in analyses by Elkins (97–110) and Hassler ("Golden Age" 111–119), and when Baley in *The Robots of Dawn* views history films on "the Auroran pioneers . . . the founding fathers," he is represented as being conscious of how "the hagiographic attitude of historians" gets in the way of his attempts to understand "the broad brushstrokes" (RD 47, 48) of history – an understanding that comes to the fore with the later psychohistorians.¹¹⁰ *The Robots of Dawn* also comments on the narrative quality of historiography and the tendency to read it as suspenseful fiction: "History was interesting to the extent that it was catastrophic and, while that might make absorbing viewing, it made horrible living" (RD 49). What is more, Asimov integrates many of his early robot stories into the early mythology of this fictional world. For example, the Susan Calvin story "Liar" becomes an ancient legend (RD 86) that foreshadows the role of the telepathic robot R. Giskard, and the novel consummates the relationship between Baley and the Solarian Gladia Delmarre, only hinted at in *The Naked Sun*.¹¹¹

The retrospective view Asimov has on the whole series gives him the opportunity in *The Robots of Dawn* to rewrite the initial steps of the guardianship. Reiterating the necessity of expansion, Fastolfe repeats worries about the Auroran wish to settle new planets so that the new worlds would themselves obey the Three Laws of Robotics and do "nothing to harm

¹¹⁰ Asimov was certainly aware of these essays (see also Ingersoll 69) because he read the manuscript for the 1977 article collection *Isaac Asimov* where both Hassler's and Elkins's essays appear, and wrote an afterword for the volume, commenting generally on "all the deep meaning and all the impressive subtleties that the essayists find" even as he wanted to try "not to think about it too much" ("Asimov's Guide" 206). In his essay, Charles Elkins notes how Asimov's work conveys the basic assumption that human nature does not change. Elkins points out that this is also the basic assumption of Asimov's own 1953 essay "Social Science Fiction," and that this "undercuts any notion of significant change," even though at the same time Asimov presents science fiction as literature that deals with change (98–99). In *Foundation's Edge*, Asimov then envisions a collective consciousness as the future of humankind, which is something that would certainly assume multifaceted change in human nature, not only physically, but spiritually to allow humankind to accept the loss of individuality it entails (see below).

¹¹¹ Asimov holds on to stereotypical gender roles even in *The Robots of Dawn*. In fact, in his 1980s novels this tendency becomes even more visible because his 1950s novels had only few female characters and showed practically no love or family relationships.

human beings, either by commission or omission” (*RD* 110). In addition to foreshadowing the planet-wide organism of Gaia, this also presents the problem of bypassing the necessary frontier strife, as discussed in chapter 4. Fastolfe’s opponent Kelden Amadiro, the founder of the Robotics institute, wants colonialism without any of the struggle and for human-like robots like Daneel to carve the new planets “into Auroras *before* human beings go here” (*RD* 312). Because Fastolfe opposes such a life-saving solution, he implicitly also accepts the death of countless individuals. Thus, the acts of guardianship that Asimov’s heroes engage in frequently seem to involve decisions that entail struggle and suffering for large masses, in the belief that this struggle will in the end produce a more viable culture that can survive.

However lightly the social Darwinist Great Men of Asimov’s 1940s and 1950s works seem to make such decisions, in his later works the characters are no longer as oblivious to the high cost of the game they play on the masses of people. They seem more concerned than before about making choices that they can be sure will advance the greatest good for as many as possible even in the present. Thus, in *The Robots of Dawn* Fastolfe dreams of founding the psychohistory that, he believes, would enable guardianship with scientifically proven certainty instead of mere heroic intuition:

[T]here may come a day when someone will work out the Laws of Humanics and then be able to predict the broad strokes of the future, and *know* what might be in store for humanity, instead of merely guessing as I do, and *know* what to do to make things better, instead of merely speculating. (*RD* 113)¹¹²

Fastolfe’s project of refining the positronic robot brains is really about his attempt to understand the human brain and thus “take at least a small step toward . . . psychohistory” (*RD* 117), but in doing so, he also contributes to the

¹¹² As noted in 5.2, in the story “That Thou Art Mindful of Him,” the robots had merely exchanged “Robotics” for “humanics.” However, in these 1980s robot novels the guardian robot Giskard genuinely tries to discover human laws similar to their robotic laws to better protect humanity. Also in his 1987 short essay “The Laws of Humanics,” Asimov refers to Giskard’s formulations (*RV* 458–462), but leaves out “Thou Art,” and takes the “Laws of Humanics” more seriously to discuss human responsibility to not abuse robots. While in hindsight it could be said that Asimov’s 1940s Foundation heroes of course *could* afford to be more casual about the big decisions because they *had* psychohistory, as discussed above, they exhibit this attitude already at the beginning, even where they know nothing certain about Seldon’s Plan.

Guardianship

establishment of robotic guardianship. In the end, Baley realizes the importance of Daneel, Fastolfe's prototype, and in a moment of distress, he gives Daneel the command that seems to launch the process of robot guardianship:

[Y]ou are the most important individual here, far more important than Giskard and I put together . . . All of humanity depends on you. Don't worry about me; I'm one man; worry about *billions*. (RD 341)

This is the utilitarian dream that moves the series into the direction which Asimov already experimented with in "The Evitable Conflict" and in some of the 1950s Multivac stories. By his order, Baley replaces the individual human being with "humanity" in the commands of the Laws of Robotics, and Giskard and Daneel receive further confirmation for shifting their focus from literal adherence to the Three Laws of Robotics and protecting individual humans to humankind as a whole.

In the end, Baley finds out about Giskard's telepathic ability, and comes to appreciate Giskard's role of guardian in disguise (see also Palumbo 52). At this point, Giskard has already been engaged in acts of guardianship and faced with distressingly complex utilitarian calculation problems. It turns out to be Giskard who has come up with the notion of psychohistory and the possibility of calculating the "human laws" of behavior, and inserted it in Fastolfe's mind. Thus, it is also Giskard who has put the good of humankind as a whole ahead of individuals by driving them toward the Turnerian rejuvenation of humankind by the frontier, in the process also condemning many individuals to a life of strife and suffering. Asimov further emphasizes the connection with Foundation guardianship by giving Giskard lines like "the path that must be followed" and "it is, from this point on, Earth itself that is the true World of the Dawn" (RD 434, 435) which echo Hari Seldon's speech in the *Foundation*. In the end, all that the human hero Baley has left to do is to ask Giskard to make sure that Baley's Solarian love interest Gladia will be happy even after his passing, and resign the active work of guardianship to a robot that is so much more capable of carrying it out.

UTILITARIANISM AND ROBOTS AND EMPIRE

The final robot novel, *Robots and Empire*, opens with Gladia's home planet, the Spacer world Solaria, going silent and with D.G. Baley, Elijah Baley's

seventh-generation descendant requesting Gladia to take part in his expedition to find out what happened.¹¹³ In connecting the *Robot* and *Foundation* series through Daneel's flashbacks, Elijah Baley is shown to anticipate "a period of crisis that will determine the entire future history of human beings" (RE 74) and to exhort the robots to protect Earth. Asimov here uses the vocabulary of his 1940s *Foundation* stories as Baley explicitly labels the coming events as "future history" (RE 74).¹¹⁴ As the crisis is brought on by the attack that the embittered Spacer-supremacist Kelden Amadiro is planning to carry out on Earth,¹¹⁵ the robots are faced with the urgent need to find a solution to their problems of guardianship.

In this situation, it is clear that for Asimov, guardianship by humans no longer seems possible. In Fastolfe, he has created a more realistic statesman than the idealized Great Men in the early stories. Throughout his life, Fastolfe engages in constant management, keeping Aurora under his control by "some vague concept of idealized Good," but in the end he "die[s] sadly, feeling a failure though he had never lost a battle" (RE 41). Asimov also finally gives a female character the possibility of becoming a Great Woman, when Gladia uses her status as a legendary figure in the settler lore and sets out "to prevent . . . war and ensure peace" (RE 107).¹¹⁶ Thus, she comes close to a Hardin-like hero who finds joy in her ability to influence people and her desire to utilize that skill, so that "after I am gone, history will have changed because of me" (RE 264).¹¹⁷ However, toward the end of *Robots and Empire*, Daneel and Giskard

¹¹³ As a result of the Spacers' lengthened life-spans, Gladia is by this time 235 years old, but in effect is only in her early middle-age (RE 106).

¹¹⁴ In fact, as Asimov brings the two series together, everybody seems to be talking like Elijah, or Seldon. For example, D. G. shows a similar awareness as he considers why he does not want the settlers to live like the Spacers: "The pace of historical and intellectual advance would then become too slow. Those at the top would stay in power too long. Baleyworld would sink into conservatism and decay" (RE 107).

¹¹⁵ Amadiro, who plans to destroy Earth by increasing its radioactivity, becomes an almost parodic villain, with "accounts to settle" and visions of being "even the lord of the Galaxy before he dies" (RE 394, 310).

¹¹⁶ A scene where Gladia tackles a crowd with ease becomes a counterpart to Baley's emergence from the Steel Caves in *The Naked Sun*. Here, Gladia leaves behind her fear of masses: "It was like I was born all over" (RE 360).

¹¹⁷ Like Hardin, Gladia enjoys the intellectual game, but just like Fastolfe, her action is to

take over in the narrative and D. G. and Gladia fade into the background. They are only mentioned at the end as a side note, when Giskard asks Daneel to ensure their happiness. The time for Great Humans seems to be over, and as the robots are taking over as supremely effective guardians, the human characters are reduced to regular statesmen or celebrity peace ambassadors.

However, thus far, the robots are also imperfect guardians of humankind, armed with awareness, but no actual means of carrying out what they know is right and constantly frustrated by the fact that they “can do so little because of the Three Laws . . . because of the fear [they] may do harm” (*RE* 27). The gist of the robots’ utilitarian calculation problems is that they do not have enough data to satisfactorily calculate the effects of their actions on every individual.¹¹⁸ Eventually they modify the Laws of Robotics and as Miller puts it, Daneel “reason[s] his way into utilitarianism” (196). But even then, they never really solve the calculation problems, only enable the prioritization of masses of people over individuals.

Daneel finally begins to reformulate the Laws of Robotics based on his recollections of a final meeting with Elijah Baley, whose words lead the robots toward guardianship and psychohistory:

The work of each individual contributes to a totality . . . That totality of human lives, past and present – and to come – forms a tapestry that has been in existence now for many tens of thousands of years . . . An individual life is one thread in the tapestry, and what is one thread compared to the whole? (*RE* 252)

Baley’s exhortation for Daneel to focus on the totality of human life becomes a mission statement for the idea of guardianship. Hence, Daneel is finally able to extrapolate that “there is something that transcends even the First Law,” because humanity as a whole is more important than the individual:

‘A robot may not injure humanity, or through inaction, allow humanity to come to harm.’ I think of it now as the Zeroth Law of Robotics. The First Law should

some extent supported by Giskard’s telepathic aid. After each change of mind in one of the human protagonists, Daneel asks if Giskard caused it and receives his assurance that it if anything, Giskard only “loosened . . . the inhibition by the merest touch” (*RE* 406).

¹¹⁸ As noted in 5.2, this problem was present even in “The Last Question” (1956), where the computer needed to compile all the data in the universe to successfully complete its calculation.

History, Expansionism, and Guardianship in Asimov

then be stated: 'A robot may not injure a human being, or through inaction, allow a human being to come to harm, unless this would violate the Zeroth Law of Robotics.' (RE 384–385)

The robots' need to prevent harm to all humanity leads to utilitarian guardianship (see Miller 195), which supersedes all built-in safeguards.

However, this creates the problem that it is much more difficult to see what causes injury to humanity than to an individual human. This idea of humanity as an abstraction is a computational problem Daneel is not able to solve until *Foundation and Earth*, where the Gaia and Galaxia aim to make humanity into one concrete object that he can deal with. *Robots and Empire* does place hints in that direction, for example when Gladia feels that her audience is "becoming one large organism" (RE 267). Furthermore, most characters in the novel are represented as so aware of history, mass psychology, and sociology, that they become rather interchangeable, reflecting the novel's more general contemplation on guardianship and historical awareness. In the end, the whole of the Galactic Empire, psychohistory, the Foundations, and Gaia are revealed as Daneel's attempts to steer humankind. But for now, guardianship of all humanity is left to Giskard's dreams of "psychohistory," which would help to "predict and guide human history" (RE 386) and take the long centuries of the First Empire and the Foundation to develop. For Asimov's robots, the crux of what Miller calls the utilitarian calculation problems is to try to "choose between an individual and humanity, when you are not sure of what aspect of humanity you are dealing with" (RE 464). In his despair, Giskard contemplates a solution which would take the guardianship to another level and foreshadows Daneel's development of Gaia:

We must be able to shape. We must shape a desirable species and then protect it, rather than finding ourselves forced to select among two or more undesirabilities. But how can we achieve the desirable unless we have psychohistory, the science that I dream and cannot attain? (RE 465)¹¹⁹

¹¹⁹ Only a few years earlier, in "The Life and Times of Multivac" Asimov's protagonist convinces Multivac to explore genetic engineering so as to produce "a human being more content to leave decisions to you [Multivac], more willing to believe in your resolve to make men happy, more eager to be happy" (*Best* 115). Although used as a distraction in that plot, the notion that developing "a new breed is clearly desirable for mankind by Multivac's standards" (*Best* 115), voices the utilitarian logic that seeks to provide the most effective possible guardianship.

Although Asimov began his robot stories with the idea to avoid the “Frankenstein complex,” Giskard’s suggestion reverts to the view of robots subjugating their creators, however benevolently. But at the same time, it is clear that the robots have developed what could be called *the guardian complex* with regard to humankind.¹²⁰ They constantly agonize over finding the best way to achieve their goals, and their calculation problems are urgent practical issues that force them to act on educated guesses even after they have embraced the Zeroth Law.

While Miller sees the robots’ ability to shape humankind as just a way to fix the calculation problems of psychohistory (196), to me this seems a key point in Asimov’s treatment of guardianship. Giskard explicitly states what all the manipulators in Asimov’s fictional worlds have been aiming at, from the Second Foundation’s mental shaping to Multivac’s conditioning. The construction of Galaxia will become yet another act of actively developing humankind in a way the ultimately rational guardians see fit. In addition to “social evolution” (*RE* 465), Galaxia implies some kind of physical evolution as well, presumably through eugenics or generations of some kind of training that will enable the collective consciousness.¹²¹ Here, Asimov’s optimism about the abilities of the twentieth century human seems to dissipate: humankind needs augmented development, that is, it cannot simply be left alone, since slow development in some direction will not be enough. The perpetual urgency which justifies guardianship also seems to justify transforming the guarded subjects into something other than they were before.

¹²⁰ Roberts suggests that science fiction even today still exhibits (though not consciously) a tendency toward savior figures as a reflection from the anxieties caused by the way the Copernican revolution seemed to undermine “our special place in the universe,” creating a need for “chosen ones” to save the world (“Copernican” 8). In this sense, also Asimov’s guardianship theme could be read as a reflection of this same tendency of seeking to reclaim agency and centrality from the impersonal universe around us.

¹²¹ In *Robots and Empire*, Giskard transfers his powers to Daneel through some sort of telepathic programming (*RE* 507), and in *Forward the Foundation*, Seldon’s psychohistorians begin gathering people with similar mental powers with the help of Seldon’s granddaughter who has the same ability (*FF* 402–403). Asimov’s idea seems to be that the collective mental power of several individuals with this ability (*FF* 397–398) is also at the root of the mental connection which will first enable the making of the Second Foundationers, and later Galaxia – even if his 1980s novels do not explore this notion further.

For the robots, the Laws of Robotics create an obligation that is dictated by their programming beyond ethics or any symbolic White Man's Burden. Even as they reprogram themselves, the robots do so in order to better fulfil the Laws. Moreover, as they fully understand the finite laws they operate by, they are more capable guardians than humans who are always to some extent dependent on factors in their own behavior they do not fully comprehend. Now it is the robots who bypass democratic processes and operate beyond the organized society at the face of urgency, and in a Campbellian spirit, they too reason that this kind of "practice is justified . . . as serving a higher purpose" (*RE* 487). In the end, Giskard allows the slow radioactivization of Earth, because it forces Earthpeople to break free from the mother world and spread throughout the Galaxy. As he is rendered inoperative by the weight of the "necessary" decision, Giskard transfers the "burden" of his mental powers to Daneel, and reminds the other robot of the responsibility to "use the Zeroth Law, but not to justify needless harm to individuals" (*RE* 507). The novel thus ends in a melancholy and somewhat sentimental scene where Daneel is left "alone – and with a Galaxy to care for" (*RE* 508).

Since the robots, too, come across the need to be able to control and shape humans into a desirable species, Asimov once again entertains the idea of establishing a new and better world at the cost of freedom for all, and raises the question of how free can individuals be if this is to happen. This merits a closer look by considering the issues of guardianship and free will, which are central in the final novel of the Foundation timeline.

GUARDIANSHIP, UTILITARIANISM, AND RETURN OF THE COLD WAR IN FOUNDATION AND EARTH

As noted at the beginning of this chapter, Miller sees Asimov's Galaxia as a solution that works around the practical problems of utilitarianism by making it in effect "a proxy for the greatest total happiness" (201). *Foundation and Earth*, the final novel in the chronology of events in the *Robot-Foundation* plotline, continues to work out the intricacies of this idea from the point in time where *Foundation's Edge* left off. It depicts Golan Trevize's quest of trying to understand his choosing the collective Galaxia over the freedom of individual action. Trevize's strong individualism makes it difficult for him to submit to becoming "a dispensable part" of the collective (*Earth* 15). Being

a character for whom reason and knowledge are paramount, he also cannot accept an intuitive choice without understanding it. He has to “*know* whether the decision is wrong or right. It’s not enough merely to *feel* it’s right” (*Earth* 14–15, italics original). The plot of the novel consists of yet another voyage where Trevize is accompanied by Pelorat and Bliss on a search for Earth with the hope of understanding his decision. In a sense, this search repeats and epitomizes the attitude to history in all of Asimov’s series: Trevize needs access to the past of all humankind (the mythical origin, planet Earth) in order to understand the future (Galaxia) he has chosen for it.

During this journey, the characters argue about the ethical grounds for manipulation of the masses and encounter a variety of people and environments, all hostile in different ways. As a representative of Gaia, Bliss is horrified with the individualistic manipulators who bypass the rules of society, and thinks this will cause only chaos: “What starts . . . as a shrewd trick ends in anarchy and disaster, even for the shrewd trickster, since he, too, will not survive the collapse of society” (*Earth* 91). This seems a comment on the Campbellian heroes who ruled Asimov’s earlier science fiction. Trevize’s encounters with hostile people and environments serve to demonstrate why humankind driven by individualism cannot be trusted to govern itself, and how lack of control leads to chaos and disintegration. Reiterated throughout the novel, this pattern turns it into something like a dramatized essay about the anxiety of trying to provide the greatest good for the largest number: “In a galaxy of anarchy . . . How [can you] decide between right and wrong, good and evil, justice and crime, useful and useless?” (*Earth* 144).

Even if Trevize does not believe that society can collapse so easily and is himself more concerned that guardianship will lead to stagnation, the story ultimately seems to side with Gaia. In fact, Asimov turns every example in Galaxia’s favor, as if trying to convince himself along with Trevize. Toward the end, the essayistic quality of *Foundation and Earth* is emphasized by long sections of Trevize’s contemplations, represented through his inner monologues and his arguments with Bliss about the form of ideal guardianship. The argument goes like this: also Gaia see themselves as the “guardians of the Galaxy . . . anxious to have a stable and secure Galaxy,” and they can reach sustainable stability by making the Galaxy a “unit” (*Earth* 76, 367). This unit would be unlike all previous attempts at Galactic Empire, which have failed, because

societies of individuals were torn apart by strife. Gradually, Trevize sees that the problem with the original Seldon's Plan is that it seeks to "bring the human species . . . to safe harbour at last in the womb of a Second Galactic Empire" (*Earth* 310–311), that is, to turn inward instead of heading out. Galaxia, on the other hand, is "a member of an entirely different species of organization" (*Earth* 311). In Miller's view, Galaxia works around Asimov's utilitarian calculation problems by making all of humanity one super-being whose well-being can be calculated (201). In my view, instead of resolving the germane *us against them* dichotomy present in all of Asimov's visions of future societies, it actually merely postpones the question by turning everybody into *us*.¹²²

As the series closes with a vision of a galaxy-wide consciousness, it also closes with the passing of a 20,000 year old robot. At the end of *Foundation and Earth*, Trevize's party finally locates the uninhabitable radioactive Earth and the robot R. Daneel, who has set up base on the Moon. Daneel is revealed to have been responsible for many of the developments in Asimov's galactic history, a kind of *deus ex machina* for his plot development, and a literally machinated god figure behind all of the major societal developments in the series – the Empire, Psychohistory, Foundation, Gaia, and Galaxia.

By numerous references to Asimov's own series and to more general pulp science fiction tropes, the end of *Foundation and Earth* strips off much of the narrative draping and returns to the end of *Robots and Empire* as if no time has passed. Daneel's musings over how he took up Giskard's burden "to care for the Galaxy" (*Earth* 495) ties everything together in an encompassing version of the whodunit-explanations that Asimov employs in his problem-solving stories throughout his career.

At the same time, Daneel's godhead is diminished by his explanations of how he has painted himself into an ever-smaller corner of adequate-for-now solutions, in which preventing harm becomes increasingly difficult. Thus Daneel's final attempt at managing the guardianship in his long line of unsatisfactory solutions is to convert "humanity into a single organism" (*Earth* 497), which as a whole retains its freedom of action and needs only

¹²² Grigsby, too, sees Gaia as merely Asimov's "psychological control theory updated, à la *Walden II*, under the influence of B. F. Skinner and other behaviorists, according to whom everything supposedly can fit harmoniously together in a coexistence satisfying all needs, in perfect, controlled, peaceful balance" ("Reversal" 177).

worry about its own well-being. As Daneel explains, his adherence to the Laws of Robotics prevents him from making the decision of whether or not to go ahead with Galaxia, and thus he needed a human, Trevize, to make this choice – returning the robot’s burden back to that of the white man.¹²³ However, Trevize’s choice is transformed by the hermaphroditic child, Fallom, who they have rescued from Solaria on their planet-hopping quest. While Daneel can no longer redesign himself to continue his existence, he plans to merge his mind with Fallom, so that he is no longer bound by the Laws of Robotics, and will live long enough to establish Galaxia. The whole concept of a god-like robot becoming flesh to lead humankind to salvation provides Asimov’s series a curiously biblical resolution. The fact that *The Caves of Steel* ends with Daneel absolving a murderer, saying “Go, and sin no more” (CS 270), now resonates with the biblical overtones of a robot Messiah that will become human and lead the way to the paradise of Galaxia. As the guardian, Daneel retains the freedom of action, “necessary until Galaxia is well established” (*Earth* 498). In this respect, the series ends with a return to the individual, whose ethics will be noble enough to advance the good of the whole of humankind, even without the guidance of any inescapably programmed laws.

In the end, however, Trevize finds justification for guardianship in a vision of potential hostility that dilutes all the previous attempts of achieving societal harmony. Trevize seems to assume that life is a struggle also in other galaxies and that “[p]erhaps it is their mutual struggle that preoccupies them, but what if, in some Galaxy, one species gains domination over the rest and then has time to consider the possibility of penetrating other galaxies” (*Earth* 509). Thus, *Foundation and Earth* ends with a vision where, instead of finally absolving life from the Darwinian struggle and humanity from the Turnerian struggle on the frontier, this struggle merely continues on a yet larger scale:

An invader that finds us divided against ourselves will dominate us all, or destroy us all. The only true defense is to produce Galaxia, which cannot be turned against itself and which can meet invaders with maximum power. (*Earth* 509)

¹²³ Here I use “white man” in a metaphorical sense of the (Western) culture that fashions as its mission the civilizing of other “lesser” cultures. While Asimov, actually, carefully seems to avoid any references to Trevize’s appearance that would give away his ethnicity – other than the inconclusive “lovely brown eyes” (*Edge* 46) – he writes Trevize as a prime specimen his typical, very American, heroes.

In Trevize's vision, Galaxia becomes a kind of intergalactic Reaganite Strategic Defensive Initiative, turning the harmonious Gaia idea into a gloomy Cold War ending on the final pages of the novel. Hence, what at first seems a way out of the endless cycles of strife is transformed into yet another stage of possible conflict. This brings about the abrupt end to the whole series, as none of the characters question Trevize's vision or the supposedly hostile nature of the hypothetical visitors from other galaxies. Daneel listens with "benign gravity" (*Earth* 509), which seems to confirm Trevize's conflict-bound intuition, and even Bliss/Gaia, who so greatly values harmonious life, is swayed by Trevize's "frightening" picture of a new us-against-them dichotomy, and merely asks: "Will we have time to form Galaxia?" (*Earth* 510). Trevize concludes by estimating that the situation where "no other intelligence has impinged on us . . . need only continue a few more centuries . . . and we will be safe" (*Earth* 510) as the fully established guardian Galaxia. This emergency measure is a reaching back to some proverbial womb of humanity and looking for the utopia of indestructible safety, even as the energizing threat of a struggle remains.

What is more, taking into account Asimov's constant emphasis on the need for expansion to survive, the ending of *Foundation and Earth* also implies that just as beings from other galaxies may seek expansion, Galaxia, too, can expand to other galaxies. After all, as Gaia is to expand into Galaxia, the very nature of the inclusive group consciousness seems to be expansive.¹²⁴ Galaxia's perpetual womb is also a move in the direction of the Cosmic AC in Asimov's 1956 story "The Last Question," although its fledgling collective consciousness is still rather far away from the all-encompassing, and frankly comic, Cosmic AC.

The ending of *Foundation and Earth* seems to curb the series' potential for acknowledging humankind's need for change, for finding that "something new" (*Earth* 489, 508), or at least accepting difference. While Fallom's difference is something new that can lead to the salvation of humankind by the merger with Daneel, for Trevize, Fallom also represents "the enemy already here and among us" (*Earth* 510). Trevize is unable to "meet the brooding eyes of Fallom – hermaphroditic, transductive, different – as they

¹²⁴ The threat to human expansion is also briefly present in *Robots and Empire*: "if there were another intelligent species in the Galaxy that was more advanced than we are, we would not have had a chance to expand" (*RE* 294).

rested, unfathomably, on him” (*Earth* 510). Not all that much has changed: Fallom is “unfathomable” and frightening, xenophobia and paranoia prevail, and conflict seems inevitable. Despite the potential for cooperation in the collective consciousness, Asimov’s series thus seems to end with a humankind familiar from Campbellian science fiction. In the end, Daneel with his benign robotic laws fades into the background and the expansive humanity seems to prepare for war once again.¹²⁵

In the human galaxy, this development does not promise to change the dynamic of the hidden guardianship by the secret elite in any significant way. It seems that the general public will not be aware of Galaxia any time soon: Fallom will only become the latest hidden guardian, some kind of a posthuman, robot-cum-human god-like entity, who will oversee the transition to Galaxia from behind the scenes. Also, if the retroactive continuity of Asimov’s series is taken seriously, by the logic of the fictional world, the *Encyclopedia Galactica* quotations, which indicate the establishment of the Second Galactic Empire but make no mention of Galaxia, imply that humankind will remain essentially unaware of all this. Thus, the notion of a hidden guardianship which Asimov established in his 1940s Foundation stories continues with ever new ways of control.

As Miller notes, even psychohistory, with its assumption that most people will have to be unaware of its details for it to work, “commits Asimov to a paternalistic conception of government” (199). Similarly, Grigsby has criticized Asimov’s *Foundation* series for focusing on control, “where psychohistorians control minds, blot out memories, and erase thoughts to keep the ‘normal’ humans from developing the ‘wrong’ way” (“Asimov’s *Foundation*” 153). This paternal control goes hand in hand with guardianship, and although Trevize comes to represent the anxiety over losing individuality, the series ends before imagining what being part of Galaxia would actually mean for all of humankind. Being “firmly inculcated with the equivalent of Law of Robotics” (497), the Gaians happily accept their lot as cogs who value

¹²⁵ Touponce reads this as an ending “worthy of the best classic science fiction of the Golden Age,” even if he sees it as “depart[ing] considerably from the norms established by Campbell during the Golden Age” (94). However, I would argue that this departure is fairly minor, and indeed in Campbell’s spirit, since the novel ends by reinforcing guardianship and anticipating further conflicts, now between human or humanlike creatures and truly alien intelligences.

the superorganism above themselves. The series ends with a situation where both the Foundations think they got what they wanted, all the while remaining unaware of Gaia's existence and subject to the concealed guardianship, at least until Galaxia is established.

Of course, as a storyteller Asimov always left openings for sequels – which Trevize's instinct of the threat of Fallom and/or some extragalactic invader certainly are – and indeed he had intentions of continuing the series before being convinced by his editor to write the *Foundation* prequels *Prelude to the Foundation* and *Forward the Foundation* instead (White, Isaac 242). Nevertheless, by ending with Galaxia, Asimov's series concludes with a contradiction: On the one hand, it entails the promise of breaking out of the endless cycles of rise and decline and the survival of the fittest. On the other hand, it seems to be yet another iteration of the paternalistic, concealed guardianship and conflict-bound expansionism.

FORWARD OR BACKWARD? PRELUDE TO FOUNDATION AND FORWARD THE FOUNDATION

The novels *Prelude to Foundation* and *Forward the Foundation* are essentially a biography of Hari Seldon, and they recycle several narrative motifs from Asimov's earlier works. In addition to Seldon's personal relationships, they depict Trantor's cultural diversity and details of history as part of Seldon's lifelong mission to construct the theory of psychohistory into a practical device with the help of Daneel, who is disguised as the emperor's minister. The novels refine some details of psychohistory, but never venture beyond it, and Daneel merely notes that he also works on another project, "in some ways even more radical than psychohistory" (PF 430), presumably referring to Gaia. All in all, these final novels work backward and focus on the past, as they fill in some of the details of connecting all the robot and Foundation stories.

Prelude is so comprehensively built on references to both real-world history and societies and the already published *Robot-Foundation* novels that tracking the references seems to yield little information on it. There are analogies to India under British colonialism, Jewish exile, and others, and Seldon hears of the exploits of the now-mythical ancient heroes "Ba-Lee" and "Da-Nee" (Baley and Daneel), before actually meeting Daneel, much the same way as Trevize does in *Foundation and Earth*. In addition to further connecting the series, in this way Asimov points out how actual historical facts

turn into myths, and the novel's narrative tension is based on the characters' quest to extract grains of truth from the myths.¹²⁶

These novels focus decidedly on the character of Seldon himself, and convey a sense of an older scientist looking back at his life. By the time of writing, Asimov was already terminally ill and he passed away only some weeks after completing *Forward the Foundation*. Indeed, along with the biography of Seldon and his lifelong project, Asimov is here also writing a metaphorical account of his own life's work with science fiction, revisiting all of his favorite themes once more. In the straightforward manner of the great explainer he was, his comment on the dust jacket of *Forward the Foundation* even explains how "over time, Hari Seldon has evolved into my alter ego." The end of *Forward the Foundation* recounts Seldon's dying moments as he views the Prime Radiant one last time: "What I see before me, around me, is the future of humanity . . . yes, softly beaming, a steady light of hope. . . . This – *this* – was my life's work. My past – humanity's future. Foundation. So beautiful, so alive" (*FF* 415, italics original). Describing the magnificence of his own creation through Seldon becomes Asimov's emotional (and by no means modest) comment on the work of connecting the *Robot* and *Foundation* series, but also his incredibly prolific life's work as a whole. As Asimov does not continue to imagine Galaxia further after *Foundation and Earth*, it thus seems fitting that he would end his work on the series with psychohistory which, together with his variations on the Laws of Robotics, is his most lasting fictional creation.

As Sutherland notes, Asimov's "technological-utilitarian philosophy [was] founded on an articulate atheism" and the "Manhattan Project inspired optimism in science's powers of redemption" (177). In a sense, then, his final novels seem like a rational scientist's final attempt at creating an actor that would take care of humanity in God's stead.¹²⁷

¹²⁶ This illustrates Asimov's conscious take on historical processes. What is more, the search for psychohistory makes *Prelude* a Kuhnian story of a scientist at a crisis (Touponce 71). Aided by Daneel, Seldon finally develops psychohistory that provides, as Daneel sees it, "a tool that might make it possible to identify what was good and bad for humanity. With it, the decisions we could make would be less blind. I would even trust to human beings to make those decisions and again reserve myself only for the greatest emergencies" (*PF* 429).

¹²⁷ In a way, Galaxia entails hope of an afterlife for the individual as a part of the whole which goes on after him. Like Asimov's own favorite story, "The Last Question," also his *Robot-Foundation* series ends by assuring that there will be something that makes sure that human civilization goes on in some form.

5.4 CONCLUDING REMARKS: THE GREATEST GOOD FOR AS MANY AS POSSIBLE

In this chapter, we have seen Asimov's series progress from early Foundation stories toward the more inclusive guardianship of a collective consciousness in Galaxia. Naturally, Asimov's intentions change in the course of the series, and while the originally separate sets of robot and Foundation stories share significant features even in the 1950s, Asimov seems to become more consciously aware of their interconnected motifs in the 1980s, when he begins to tie them together.

In combining the social engineering of Campbellian science fiction with his own Enlightenment sensibilities, in his fiction Asimov thus seems to seek for ways to engineer a society that would provide the greatest good for as many as possible. Although in the real world Asimov was a stout defender of education and learning, in his fiction he does not seem to trust the capacity of the masses to improve. Here, Asimov recurrently seems to work from the notion that the mass populace cannot reach (scientific) enlightenment and his heroes see no real problems in assuming guardianship of such masses. On the contrary, they ceaselessly fight against their societies' tendency to stagnate and decay. Thus, for them, this kind of societal entropy only validates the necessity of assuming guardianship at times of crisis.

Much of Asimov's series focuses on the characters' maneuverings and solutions to the recurrent crises and emergencies. Indeed, the problem-solving formula is the structural backbone of much of Asimov's fiction to the extent that at times the puzzle formula or detective story seems to override science fiction in his work (see Pierce 32–58). The detective story is of course the genre of rationalism *par excellence*, and even though Asimov does not always write the kind of explicit science fiction detective stories as his early robot novels, his work regularly entails battles of one rationality against another, where the superior rationality always wins (see Gunn 44–48). Thus, by their knowledge of history, his characters understand that society needs to be steered, frequently through the favored method of frontier rejuvenation. In Asimov's meritocratic fictional worlds, the ones who are the most aware of history need to assume guardianship and use their abilities to solve the puzzles that stand in the way of the common good. Thus, from one Asimov story to

another, a power elite takes it as their mission to actively steer humankind toward a better future.¹²⁸

Despite his long line of benevolent autocrats and heroes that work for the common good, in the end Asimov does not seem to trust humankind to make responsible altruistic decisions. Hence, what started as brief thought experiments in automated ethics and social guidance resulting from the Three Laws of Robotics, ultimately makes Asimov draft a world of comprehensive reliance on robot-driven guardianship. Even in his 1950s stories such as “Evidence” and “The Evitable Conflict” (see also Warrick 192), Asimov develops the Laws of Robotics into an ethical code that can be computerized and automatized. Then he experiments with a kind of Benthamian panopticon society in the Multivac stories where the machines have all possible knowledge at their disposal and are thus more capable of making decisions than humans. Finally, Gaia and Galaxia work toward a guardianship where every individual effectively becomes part of the guardian, in an attempt to do away with the resentment that knowledge of being steered always induces. On the whole, Asimov’s body of work thus becomes a succession of solutions to avoid cycles of decline and fall caused ultimately by human error and fallibility.

¹²⁸ Despite all the similarities between Asimov and Wells in the visions of benevolent educated power elites, Wells connected it more centrally to his present society and politics, making it part of his larger agenda of a world state. Asimov, on the other hand, focused more on science and mostly steered away from politics or activism. Indeed, it could be said that Golden Age science fiction on the whole, too, always remained more within its own circles, focusing on its fictional worlds and on what science fiction could contribute to the discussion. Wells, on the other hand, made his fiction a testing ground for the sociopolitical ideas which he actively sought to forward also in his present society. Naturally, the urgency with which Wells tackled the sociopolitical issues can be linked to being also physically closer to the upheavals and anxieties before and during both world wars, and, as Wagar argues, much of Wells’s early twentieth-century writing sought for ways to harness the wartime forces and social upheavals to be used in world integration, not its demolition (189). Campbellian science fiction, on the other hand, retained its pulp approach of great heroes and fast action even in its admiration of the Enlightenment.

CHAPTER 6

CONCLUSION: ASIMOV AND UTOPIA

Every SF story describes a certain, particular change and decides whether it's for the better or the worse. Generally in SF stories the change is for the worse. . . . So we are constantly writing anti-utopias, the idea being that this is a change we don't want to take place; how do we prevent it? . . . SF teaches that there are numerous changes and that mankind by its actions can pick and choose among them. We should choose one which is for the better. (Asimov as qtd. in Ingersoll 76)

Throughout his career, Asimov held on to Campbell's ideal of using science fiction to find "a better way of doing this." In interviews, Asimov often discussed science fiction as a literature of change and a continuous search for a better way. Although in the comment above he also touches on the author's creative license to assume whichever attitude or worldview fits the needs of their current fictional story (70), in his own fiction he consistently champions the cause of acknowledging change and meeting it with scientific reasoning. Crafting dramatic stories on these premises – and being, as Wolfe characterizes him, "an apostle of rational management" ("Ask" 37) – Asimov tries out visions of the future which largely incline toward rational control and are marked by a sense of urgency to find the best possible solution for the future of humankind. In general, American science fiction authors who began their work in the 1940s paid less attention to character or style than to ideas and inventions, but even among them, Asimov was one of the keenest to focus on imagining the future of society as a whole.

This study has shown that Asimov's work exemplifies the mid-twentieth century development of American science fiction, an era where the action-adventure oriented variety of the genre started to turn toward considerations of the wider historical and political implications of the futures imagined. A prominent sideline of my analysis has been to critically revisit Campbell's thought – in terms of its effect on Asimov and the spirit of Golden Age science fiction in general – in order to show how, through his editorship of *Astounding*, Campbell sought to imprint on science fiction a set of ideals of how and what to write. Implementing Campbell's ideal that engineers and scientists were

the ones who could find a better way to organize and govern society, authors often presented rather cynical and techno-meritocratic visions. In a sense, this strain of elitism could already be found in the preceding magazines. While the hobbyists who read Gernsback's early magazines like *Modern Electrics* could see themselves as the elite who understood science and engineering, the readers of Campbell's magazine could include themselves among the even fewer select who also realized how science, together with common sense and American pragmatic creativity, could be used to affect society and ultimately to steer the course of history. In addition to the demand for more rigorous use of science, crystallizing the genre's 1940s aspiration toward this kind of storytelling was one of Campbell's most important achievements. This development is a refinement to, rather than a complete revolution of, the dime novels and pulp action adventures which shaped the stereotypical American hero of popular fiction. Asimov's professed Enlightenment ideals, too, are accompanied by the spirit of action-adventure fiction. In other words, in Asimov's work, the tendency toward strong visionary heroes who steer the dramatic action frequently leads to backgrounding the ideals of democracy and replacing them by space age cowboy politics of bold decisions and intellectual duels where the future of humankind is at stake.

First, this study analyzed the notion of history in Asimov's fiction. As we have seen, Asimov creates fictional worlds based on his reading of world history, and uses the techniques of the historical novel to emphasize the sense of historicity, especially in the *Foundation* series. But his work also conveys a strong need to steer the course of history. Asimov portrays many of his key characters as highly aware of the workings of history, and capable of using this understanding to affect the course of events by assuming guardianship over their societies. Rather consistently, this leads to guardianship by the fittest, in keeping with Campbell's favored ideals of meritocracy and social Darwinism. At the same time, Asimov's characters show very little concern for any adverse consequences of their empire-building process on individual members of the masses, and their imperialism and manipulations are largely represented as an abstract intellectual project. Although Asimov saw himself as writing "social science fiction," that is, fiction portraying the effects of changes on the level of entire societies, this is mostly in the background. In fact, instead of actually portraying the societies at large, Asimov's stories frequently depict

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powerful individuals engaged in a constant battle of wits and problem-solving, progressing from one crisis to another. Thus, Asimov's main characters are emblems of societal forces rather than individual agents, but at the same time they reinforce the view that history is made by back-room deal-making and manipulation that bypasses democratic processes. Recurrently, this is justified by the fact that they use their exceptional ability to lead the masses in a perpetual state of urgency, where the society is always on the brink of some crisis which only the protagonists understand.

One of the major societal concerns in Asimov's *Robot-Foundation* series is the stagnation of humankind, to which expansionism is the recurrent answer. Indeed, the present study has shown that the frontier theme is present in Asimov's work to a much greater extent than previously has been acknowledged. As we have seen, the protagonists' consciousness of history and ability to learn from it so as to achieve the greatest good for all humankind frequently leads to expansionism, because it is taken as the key method to reintroduce self-renewal at the frontier. As I have noted, this is a rather extreme development of Turner's Frontier Thesis, linking the frontier to the endless growth of civilization. In this process, building an empire, or a collective of humankind becomes the goal.

Second, the pervading frontier theme and the role of individual heroes in Asimov's work reflect the Western backdrop of American pulp fiction. Despite Asimov's Enlightenment ideals and explicit use of historical models, his works also exhibit the popular glorification of frontier character types and power politics of the 1940s and 1950s American science fiction. At the same time, Asimov and other Golden Age science fiction authors developed the common frontier action-adventure story tropes by shifting the focus from physical to intellectual action. In this sense, the hero of Golden Age science fiction is a novel version of the lone gunman: a scientist, politician, or administrator who is a problem-solving engineer version of the cowboy hero who takes justice into his own hands. He is a hero of intellectual action, who uses words and quick wit instead of fast guns, transcends conventional democratic procedure, and employs his ability to step out of the crowd in order to defend it.

However, even though Asimov's series features in prominent roles many characters akin to stereotypical cowboy heroes, finally it is the robot, with its perfect machine morals, that surpasses the politician or even the ideal

scientist/engineer as the preferred guardian. Although Asimov began writing his robot stories in the 1940s with the idea of avoiding the “Frankenstein complex,” his 1980s additions bring to the series what could be called *the guardian complex* of the robots over humanity as they search for the best way to guard and steer humankind. Furthermore, despite the focus on individual characters, the real protagonist in much of Asimov’s fiction seems to be the humankind as a whole. These are stories of the humankind using technology, wittingly or unwittingly, to construct robot guardians and then climb back into the security of the mechanized wombs they create.

Finally, I have shown that the consciousness of the workings of history and the frontier lead to guardianship, which can be seen as the key concept of Asimov’s series. Understanding the workings of history has a very concrete utilitarian value in that it provides ways to induce desired societal effects. In Asimov, the attempts to solve the calculation problem of achieving the greatest good for all humanity leads to a consequentialist approach, where a good end result justifies rather questionable actions. The Campbellian ethos of science-based rationalization comes up repeatedly in Asimov’s series, even though his 1980s novels tentatively challenge this notion through the protagonists’ debates over the ethics of such manipulations. Even as Asimov’s guardian actors seek benevolent outcomes, the power elites he depicts are often revealed to be controlled by yet another more concealed power elite, creating worlds that consist of layers of hidden control, elitism, and meritocracy. The urge for control, then, is a recurrent conclusion in Asimov’s fictional worlds. At the same time, for Asimov, a viable society requires constant management, but since that management also causes a constant tension at the resentment of limiting individual freedom, the guardianship must be secret and remain outside the society itself. Galaxia seems to have the potential to change this by including everyone and everything in its collective, but the series nevertheless closes with Golan Trevize reiterating the familiar notion of struggle between cultures, thus emphasizing the precarious survival of humankind.

Asimov’s narrative of cycles of decline, fall, and revitalization of civilization also leads to continuous growth. At each turn, the cycles of humankind’s expansion are larger than previously, and the fall never returns the society quite to the level of the previous fall, thus causing an expansive upward motion. However, although expansion and empire-building are

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recurrent solutions in his representation of the ebb and flow of civilization, Asimov also demonstrates that instead of lasting solutions, every expansion and empire can only solve the problem at hand.

Despite ending with the familiar notion of impending crisis and the need for control, the final novels in Asimov's series seem to be an attempt to break away from these cycles toward the managed stability of the greatest good for as many as possible. This seems to suggest that the constant management and unrelenting effort can at some point be overcome. Still, at the same time, Asimov's encompassing vision of the future, created with vast plot and thought structures, also makes it a prisoner of its own premise: the repeated structures ultimately permit no breaking away from the cycles of endless growth. Even as *Galaxia* suggests a way to go beyond this contest of survival by expansion, it is in fact an additional cycle of deferral of stagnation through expansion, once again induced by a guardian actor. It would seem, then, that Asimov's aim for a unity of vision in connecting the two series allows no final change of perspective.

Even if the series begins with the blueprint for the future in the Foundation guided by the Seldon Plan, it is soon moderated into a journey toward a solution – well aware that the course may have to be amended as the journey continues. In its emphasis on the need for constant management and adjustment, in the analysis, the series suggests the impossibility of a truly utopian solution, even if it at the same time implies a longing for one. It thus seems that Asimov's work forms a tension with the notion utopia, which must still be addressed.

The concept of guardianship has been in focus at the end of this study. But what does it entail in terms of Asimov's works as a whole? As we have seen, Asimov's *Robot-Foundation* series often centers on the question of what makes good and effective government of the masses. As for Asimov's claim of writing social science fiction that examines the (potential) effects of scientific development on human society, to what end is that government ultimately used? Through the *nova* of robots, intelligent machine- or science-based social engineering, Asimov tries out various ways of controlling humankind in order to maximize its well-being and chance of survival in the future. While the themes of control and even determinism frequently crop up in his work, the final aim of this guardianship would seem to imply the desire to construct

a utopia. The novel set last in his fictional universe, *Foundation and Earth*, ends with the character Golan Trevize's visions of an intergalactic threat to humankind, but also with his estimate that building Galaxia to a stage where it can defend itself against such hypothetical menace is only a few centuries away, and then "we will be safe" (510). Such an ending that leaves the plot suitably open for further novels is also perhaps the clearest iteration of the desire which remains largely unnamed throughout Asimov's series. That is, in all its reliance on and optimism about science, Asimov's work exhibits a fundamental, and rather idealistic hope that someday humankind might actually possess enough knowledge and understanding – some of it perhaps gathered also through science fiction – to actually be able to choose a change, or a future, "which is for the better," as he puts it in the 1976 interview. Presumably this would mean finding some solution to humankind's age-old question of how to build a stable society which provides a peaceful future without stagnation but also without the need for constant management and unsatisfactory, partial solutions.

This tendency can be detected even in Asimov's original *Foundation* trilogy: the Seldon Plan promises to guide the Foundation through crises to the safe haven of the Second Galactic Empire. As noted, the Second Foundation envisions this as a society where "[c]ontrol of self and society [would no longer be] left to chance or to the vague gropings of intuitive ethical systems based on inspiration and emotion" (*SF* 115). Similarly, Asimov's robot stories develop from considerations of simple safeguard mechanisms, which protect the human users of robots, into encompassing considerations of robot-driven guardianship. Even the Multivac stories reiterate this notion – a kind of unnamed desire to relinquish the responsibility of keeping humankind on track to some kind of automated agent. However, Asimov's series also tirelessly points out the flaws in the solutions it devises. *Foundation's Edge* finally questions the longevity and beneficiality of the kind of empire that the First or the Second Foundation could build or maintain. Here, the narrative moves on to offering the next solution, Galaxia, which in turn is debated in *Foundation and Earth*. Constantly building fictional worlds where the guardians' awareness of history dictates their need to take the wheel and stop humankind from repeating the old mistakes, Asimov's series also recurrently implies that all of the solutions are only temporary on the way toward something else. This creates a sense of

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continuous urgency, but as the characters become weary and ready to pass on the torch, it also creates a yearning for stability that would not lead to yet another fall. This begins in Asimov's work as a reflection of the 1940s context of pulp science fiction and the social upheavals of the Second World War, which seem to lead to a yearning for sustainable stability. It is also linked to the positivist reliance on the power of science (and technocratic management) to solve the problems of the world, and the continuous search in Campbellian science fiction for pragmatic solutions. But is it a longing for utopia?

The entanglement of the utopian tradition and science fiction is of course widely recognized, and for example Suvin goes as far as to define it as "the socio-political subgenre of SF" (38). More critically, Fredric Jameson points out the uneasy political and ideological questions utopia raises. This is due to the fact that it easily comes to stand for the "will to uniformity and the ideal purity of a perfect system that always ha[s] to be imposed by force on its imperfect and reluctant subjects" (Jameson xi). However, instead of simply offering jaded uniformity, Jameson sees science fiction as capable of addressing what he labels *utopian desire*, the collective yearning for utopia which remains unsatisfied (84). This wish for the unattainable is at the heart of *critical utopia* that "reject[s] utopia as blueprint while preserving it as dream," articulates the process of social change, and focuses on the difference and imperfections within utopian society itself to seek for ways to address these issues (Moylan 10). Thus, instead of claiming to have *the* answer, critical utopias suggest possible answers and present potential directions toward which to strive (see Rogan 314). Much indebted to Jameson and Ernst Bloch, Freedman similarly sees the "dynamic of science fiction" as linked to "the hope principle itself" (*Critical* 69). While this "unalienated homeland where we have never lived – can only be apprehended obliquely and partially," science fiction can help to refurbish the "pre-science-fictional literary utopia by making the genre of utopia more concrete as novelistic, and therefore more critical in theoretical stance" (Freedman, *Critical* 72, 85).

Now, in the final analysis, it seems that Asimov's work reflects a certain utopian desire, but at the same time shies away from its critical potential. Freedman sees in Asimov's *Foundation* trilogy "a considerable reserve of utopian energy" at "projecting potential futures of freedom and positive human fulfillment" (*Critical* 70). But in his view, this is marred by the way the series

leans toward determinism and mechanistic behaviorism, making its attempt at utopia at best a “fragmentary construction” (71). As the utopian goal of a stable but self-rejuvenating society in Asimov’s series is modified and many compromises are made along the way, Asimov seems to be painfully aware of the impossibility of arriving at the utopia posited by the original vision of the Seldon Plan. In his fictional world, psychohistory, Second Foundation, and Galaxia are ways of working toward a society that is still seeking its desired form as it is being built.¹²⁹

It is only in passing moments, especially in the essayistic aspects of Asimov’s final novels, that there seems to be a tentative search for ways out of the endless cycles of emergency survival measures and a questioning of the constant management and manipulation. Still, even as Asimov’s work reflects an awareness of the unattainability of utopia, it does not quite become critical utopia in Jameson’s sense of open-ended plurality and resistance to closure. Asimov’s series frequently goes on to apply emergency solutions, which hinders its potential to consider real alternatives. In the process, Asimov never questions the goal itself – a peaceful society of economic well-being which appreciates science and where men are free to actualize their ideas and desires – only the methods by which that goal might be reached.

While it could be said that the technocratic ideals of Campbellian science fiction are utopian in their hope that science and technological advancement will be able to solve all of humankind’s problems and ultimately improve society (see Clareson 37), the continuous search in Asimov’s work seems a longing for utopia for men like him. The presupposition is that this rationally and scientifically managed world is a system which ultimately benefits all humankind. The *Robot-Foundation* series never really detaches itself from the elitist white man’s perspective, and thus seems oblivious to the fact that the

¹²⁹ Some critics expressly see no utopia in Asimov’s series. Fitting, for example, takes the *Foundation* trilogy to represent the “world’s difficulties . . . as susceptible to scientific solutions while the utopian impulse has been suffocated in the characteristically American abuse of science through subservience to an apparatus of control.” In Fitting’s view, psychohistory is not an attempt “to bring about a different, better world, but to preserve the already existing society from external threats. The possibility of real change and the reality of history are denied through the Spenglerian cyclical model of history and through the return to a future in which the ethics and economics of capitalism have been maintained” (Fitting, “Modern” n.p.).

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happiness of others may not entail or be achievable by the same methods as his. Granted, discussing the *Foundation* trilogy, Asimov noted that he specifically wanted the laws of history to be as inexorable as the laws of physics “for this particular story,” as a part of the thought experiment (Ingersoll 70). Still, as also the continuation of the *Robot-Foundation* series is built on this notion, which presupposes a fundamental lack of difference between individuals (and individual societies) to be able to deal with immense masses of people, it also severely limits the usefulness of his thought experiment.

Gaia in *Foundation's Edge* is a closed-off, self-contained planet where the utopia for Gaians works perfectly, not least because Gaia keeps to itself. In this sense, Asimov's Gaia could be interpreted as an island isolated from the rest of the world in the tradition of Thomas More's *Utopia* – something that in fact creates the utopian state by forming an enclave and pushing out all unwanted elements, as is the case in traditional utopias, according to Jameson (10–21; see also Roberts, *Jameson* 108). Asimov's Galaxia is, then, a kind of attempt to open this walled-off island to include all of humankind. But as Asimov's entire notion of a collective consciousness is based on making humankind (and its galaxy) essentially one, it merely aims to expand the walls further, to include the entire human galaxy, and exclude supposedly hostile other intelligences. This steers the series away from the open-ended plurality of critical utopia and thus Asimov's striving toward utopia seems to fall into the trap of forced uniformity that Jameson mentions. Galaxia irons out all difference, even more thoroughly than Asimov's earlier solutions of guardianship, and in this way it seems a solution to the unpredictability of humankind by making everyone the same, rather than a solution to enable the harmonious coexistence of difference. In the end, it seems that Galaxia must remain hidden, because on a very fundamental level, difference and harmony simply do not fit together in Asimov's fictional world. Thus, in terms of science fictional thought experiments, there seems to be no room in Asimov's series for thinking differently.

Even if the potential for critical utopia seems to be left unfulfilled, Asimov's work adheres to Campbell's ideal of development by science – and science fiction. The final developments in Asimov's 1980s novels are really only the latest versions of this constant drive forward. Asimov never ventures very far from his 1940s and 1950s view in his later work, even though it could

be said that the desire for some kind of optimal solution seems to be magnified along the way, reflecting perhaps also the 1970s revival of utopianism (Fitting, “Short” 121). This is true of mid-twentieth century science fiction, too, since it rarely questioned futures of capitalist excess and instead normalized capitalism and its continued growth, whereas the 1970s and 1980s science fiction employed critical utopia as a new angle on its utopian/dystopian treatments (Bould 87–91). But even as works like William Gibson’s *Neuromancer* (1984) offered a critical look at neoliberal utopia and Octavia E. Butler’s *The Parable of the Sower* (1993) at dystopia, Asimov wrote his 1980s *Robot-Foundation* series sequels much along the lines of his earlier work, keeping with the same grand narrative of meritocratic management and social engineering, and never significantly exploring the notion of critical utopia. Thus, there remains a tension between Asimov’s Enlightenment optimism and Campbellian pragmatism/cynicism: the traces of utopian hope in Asimov’s work make him seem like a utopianist who wants to construct a society with a well-functioning structure, but his positivist engineers are constantly confronted by the fact that their constructions can never hold together very long. Yet he keeps trying.

Asimov’s ambivalent relation to utopia offers a potential avenue of further research. The technocratic management and the generally positive outlook on the capacity of science, combined with the awareness of the impossibility of the utopia he is looking for, results in Asimov’s work in tensions which could further elucidate how social control and meritocracy in Golden Age science fiction turn into the neoliberal tendencies in some recent science fiction. At the same time, affinities between the aspects of meritocracy and benevolent authoritarianism in the work of H. G. Wells and Asimov would seem to warrant further investigation, given the numerous parallels between their themes, only briefly noted in the present study.¹³⁰

¹³⁰ Wells’s utopian speculations, as in his 1928 manifesto *The Open Conspiracy*, draft blueprints for a utopia of Platonic benevolent Philosopher Kings (Wagar 189), and there is something rather similar in the desire for utopia in Asimov’s work. Wells proposes a paternalist “kinetic utopia” that is in constant flux and improvement (Wagar 105–106), just as stasis is one of the greatest threats to Asimov’s fictional projects of world engineering. Both show a lack of faith in the democratic process as a sustained answer to world government, and even if Asimov’s fictional worlds never reach utopia, Wells’s utopias are much the same in that they show the difficult road and the mistakes made in reaching one. For instance, in *The Shape of Things to Come* (1933), the society collapses after a massive war, and gives way to a new order, but one that comes about only through brutal

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At the same time, the notions of utopia or critical utopia could be fruitfully explored in the work of other writers of Golden Age, such as Robert Heinlein, whose individualist characters seem to exist in constant tension with the drive for guardianship he shares with Asimov. For instance, Orth has noted the tendency of “conservative democratic visions of individualist utopias” to veer toward fascist politics in some more contemporary science fiction (294). On a related note, Santesso has argued that science fiction criticism has a history of letting these tendencies, inherited from the Golden Age, “survive long past their original historical moment” (140). In addition to further investigating the transference of Asimov’s ideas into contemporary science fiction, it seems that further research would be in order to explore the path from Campbell’s notions to more contemporary conservative and/or right-wing voices in science fiction. In addition to Campbell’s editorials to *Astounding* and *Analog* magazines and other writings, the collections of Campbell’s letters would offer abundant material for examining his intellectual legacy in more detail than is usually done in science fiction research.

As shown in this study, Asimov’s series operates with a positivistic social approach and extends the spirit of the scientific method into science fiction. It also reflects the intellectual atmosphere of Golden Age science fiction, and illustrates the way American science fiction starts to move from pulp action-adventure to social extrapolations. With his encyclopedic touch – in writing both science fiction and science fact in his popular science books – Asimov was one of the last great explainers, a self-styled embodiment of the spirit of Enlightenment, and a sort of early twentieth century version of the natural philosopher who seemed to have a grasp on all branches of science. This need to express an expansive scientific vision of all of existence is also visible in Asimov’s drive toward a narrative unity as he combines much of his science fiction into a unified grand narrative of a future of humankind. While in the 1960s science fiction developed into the New Wave which challenged the technology-oriented Campbellian Golden Age, Asimov retained the spirit

dictatorship. All in all, Wells envisioned in greater detail the ideal society towards which to strive, with science and knowledge administered by benevolent elite, compared to Asimov whose work implies utopian desire only in the final analysis. To be sure, Wells’s optimism in the ability of humankind to build the world state seemed to have faded in his later years, whereas Asimov seems to start out with much less reliance on humans reason, and ends up with the notion of guardianship by robots.

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of the Golden Age, even as grand narrative-centered views were no longer considered viable.

In this sense, rather than seeking to understand the complications and relativities of critical utopia, Asimov's series seems to imply a notion that while utopia may never be reached, the search for it must go on by way of rational management. Thus, one crisis and one partial and unsatisfactory solution at a time, Asimov's work aims toward a dynamic society, a constantly self-correcting system instead of a static ideal state. Asimov creates a world that admittedly can never reach the safe haven of a functioning and lasting utopian state, but on the other hand, it needs no blueprint, because it harbors no delusions of ever being ready and completed. Instead, it can, and must, constantly adjust its course on an endless journey toward utopia.

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